

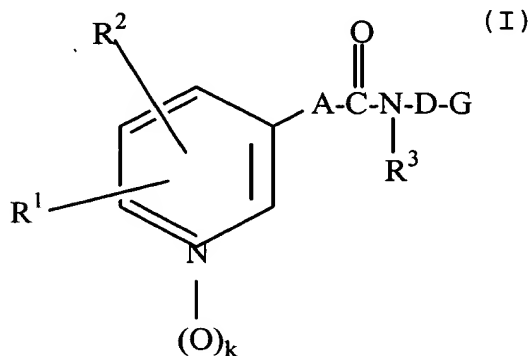
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1-54. (canceled)

55. (currently amended) A pyridylalkane, pyridylalkene or pyridylalkine acid amide compound of formula (I)



wherein

R¹ is selected from the group consisting of hydrogen, halogen, cyano, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₂-C₆-alkinyl, trifluoromethyl, C₃-C₈-cycloalkyl, C₁-C₆-hydroxyalkyl, hydroxy, C₁-C₆-alkoxy, C₃-C₈-cycloalkyloxy, benzyloxy, C₁-C₇-alkanoyloxy, C₁-C₆-alkylthio, C₂-C₇-alkoxycarbonyl, aminocarbonyl, C₂-C₇-alkylaminocarbonyl, C₃-C₁₃-dialkylaminocarbonyl, carboxy, phenyl, phenoxy, phenylthio, pyridyloxy, pyridylthio, and NR⁴R⁵, wherein

R⁴ and R⁵ are selected independently of each other from the group consisting of hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₃-C₆-alkinyl, benzyl and phenyl;

R² is selected from the group consisting of hydrogen, halogen, cyano, C₁-C₆-alkyl, trifluoromethyl, hydroxy, C₁-C₆-alkoxy and benzyloxy;

R³ is selected from the group consisting of hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₃-C₆-alkinyl, hydroxy, C₁-C₆-alkoxy and benzyloxy;

k is 0 or 1,

A is selected from the group consisting of C₁-C₆-alkylene,

a substituted C₁-C₆-alkylene which may be substituted one to three-fold by C₁-C₃-alkyl, hydroxy, C₁-C₃-alkoxy, fluorine, or phenyl;

C₂-C₆-alkylene, in which a methylene unit is isosterically replaced by O, S, NR⁶, CO, SO or SO₂, wherein, with the exception of CO, the isosteric substitution is not adjacent to the amide group and R⁶ is selected from the group consisting of hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₁-C₆-acyl, and C₁-C₆-alkanesulfonyl;

1,2-cyclopropylene;

C₂-C₆-alkenylene,

a substituted C₂-C₆-alkenylene which is substituted once or twice by C₁-C₃-alkyl, hydroxy, C₁-C₃-alkoxy, fluorine, cyano or phenyl;

C₄-C₆-alkadienylene,

a substituted C₄-C₆-alkadienylene which is substituted once or twice by C₁-C₃-alkyl, fluorine, cyano or phenyl;

1,3,5-hexatrienylene,

a substituted 1,3,5-hexatrienylene, which is substituted by C₁-C₃-alkyl, fluorine, cyano or phenyl_{7i} and

ethinylene,

D is selected from the group consisting of

C₃-C₁₂-alkylene,

a substituted C₃-C₁₂-alkylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl_{7i}

C₃-C₁₂-alkenylene,

a substituted C₃-C₁₂-alkenylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl_{7i}

C₅-C₁₂-alkadienylene,

a substituted C₅-C₁₂-alkadienylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl_{7i}

C₃-C₁₂-alkinylene,

a substituted C₃-C₁₂-alkinylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl_{7i}

C₅-C₁₂-alkeninylene,

a substituted C₅-C₁₂-alkeninylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl_{7i} and

C₃-C₁₂-alkylene, C₃-C₁₂-alkenylene or C₃-C₁₂-alkinylene, wherein, with the exception of the (G)-terminal methylene group in the C₃-C₁₂-alkylene, C₃-C₁₂-alkenylene or C₃-C₁₂-alkinylene, one to three methylene units in the C₃-C₁₂-alkylene, C₃-C₁₂-alkenylene or C₃-C₁₂-alkinylene are isosterically replaced by O, S, NR⁷, CO, SO or SO₂, wherein R⁷ has the same meaning as R⁶, but is selected independently thereof;

G is selected from the group consisting of G¹, G², G³, G⁴, G⁵, and G⁶ wherein G must contain at least one aromatic ring, wherein

G¹ is $-(CR^9R^{10})_m-R^8$

and

m is 0 or 1,

R⁸ is selected from the group consisting of benzyl, diphenylmethyl, phenyl,

anellated bi- and tricyclic aromatic or partially hydrogenated carbocyclic ring systems with 8 to 18 ring atoms, and at least one aromatic ring, wherein the linkage can occur over an aromatic or a hydrogenated ring and either directly or over a methylene group;

R⁹ is selected from the group consisting of hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₂-C₆-alkinyl, benzyl, phenyl,

anellated bi- and tricyclic aromatic ring systems with 8 to 18 ring atoms, and at least one aromatic ring, wherein the linkage can occur over an aromatic ring and either directly or over a methylene group;

R^{10} is the same as R^9 , but is selected independently thereof, or is hydroxy;

G^2 is $=CR^8R^9$

which is bound to D by means of a double bond, wherein R^8 and R^9 have the above meaning;

G^3 is $-X-(CH_2)_n-(CR^9R^{10})_m-R^8$ or $-NR^8R^9$

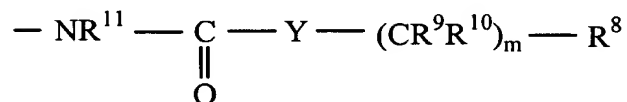
wherein m and the substituents R^8 , R^9 , and R^{10} have the above meanings, and

n is 0, 1 or 2

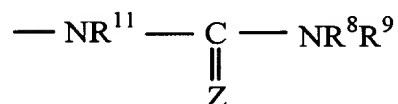
X is NR^{11} , O or S wherein

R^{11} has the same meaning as R^4 , but is selected independently thereof,

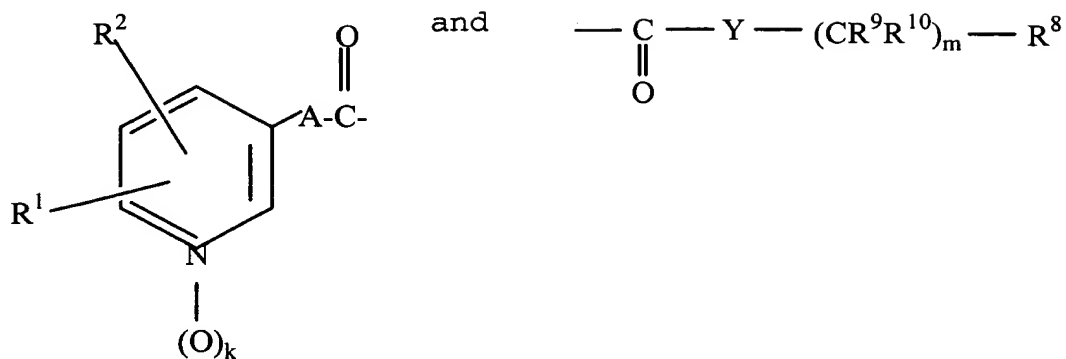
G^4 is selected from the group consisting of



and



wherein structural element D-G cannot contain a total of more than 1 amide grouping, wherein m and the substituents R^8 , R^9 , R^{10} and R^{11} can have the above meaning, wherein the residues



are not identical, and

Y is selected from the grouping consisting of methylene, ethylene, ethenylene, or represents a bond, and

Z is O or S;

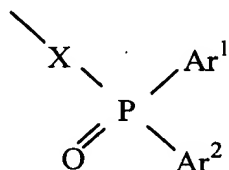
G⁵ is $\text{---NR}^{11}\text{---SO}_2\text{---R}^{12}$

wherein R¹¹ has the above meaning, and

R¹² is selected from the group consisting of C₁-C₆-alkyl and phenyl,

anellated bi- and tricyclic aromatic or partially hydrogenated carbocyclic ring systems with 8 to 18 ring atoms, and at least an aromatic ring, wherein the linkage can occur over an aromatic or hydrogenated ring,

G⁶ is



wherein X has the above meaning and

Ar¹ and Ar² are selected independently of each other from the group consisting of phenyl, pyridyl and naphthyl; and wherein aromatic ring systems in the substituents R¹, R², R³, R⁴, R⁵, R⁸, R⁹, R¹⁰, R¹¹, R¹², Ar¹ and Ar² and ring system =CR⁸R⁹ may be substituted independently from each other by one to three of the same or different groups independently selected from the group consisting of halogen, cyano, C₁-C₆-alkyl, trifluoromethyl, C₃-C₈-cycloalkyl, benzyl, phenyl, hydroxy, C₁-C₆-hydroxyalkyl, C₁-C₆-alkoxy, C₁-C₆-alkoxy entirely or partially substituted by fluorine, benzyloxy, phenoxy, mercapto, C₁-C₆-alkylthio, phenylthio, sulfo, carboxy, C₂-C₇-carboxyalkyl, C₃-C₇-carboxyalkenyl, C₂-C₇-alkoxycarbonyl, benzyloxycarbonyl, nitro, amino, C₁-C₆-aminoalkyl, mono-C₁-C₆-alkylamino, di-(C₁-C₆-alkyl)amino and, for two adjacent residues on the aromatic ring, methylenedioxy and

wherein alkyl residues in the ~~Group~~ group G can be substituted by one or two of the same or different groups selected from the group consisting of hydroxy, carboxy, C₂-C₇-alkoxycarbonyl, benzyloxycarbonyl, amino, mono-C₁-C₆-alkylamino and di-(C₁-C₆-alkyl)amino;

the cis- and trans-isomers, E- and Z-isomers including the corresponding enantiomers, diastereomers and other isomers, the tautomers and their acid addition salts including their hydrates and solvates,

wherein if R¹, R² and R³ are hydrogen, A is not -CH=CH-, D is not -(CH₂)₅- and G is not -N(C₂H₅)-CH₂-phenyl,

wherein if R¹, R² and R³ are hydrogen, A is not -CH=CH-, D is not -(CH₂)₅-N(CH₂CH₃)-CH₂- and G is not phenyl; and

wherein the compound of formula (I) does not represent [S-(R*,R*)]-N-(2-hydroxy-1-methyl-2-phenylethyl)-N-methyl-3-pyridine acetamide.

56. (currently amended) The compound according to claim
55 wherein

R¹ is selected from the group consisting of hydrogen, halogen, cyano, C₁-C₆-alkyl, trifluoromethyl, ethinyl, hydroxy, C₁-C₄-alkoxy, benzyloxy, C₁-C₄-alkylthio, C₂-C₅-alkoxycarbonyl, aminocarbonyl, C₃-C₉-dialkylaminocarbonyl, carboxy, phenoxy, phenylthio, and pyridyloxy;

R² is selected from the group consisting of hydrogen, fluorine, chlorine, bromine, C₁-C₄-alkyl, trifluoromethyl, hydroxy, and C₁-C₄-alkoxy;

R³ is selected from the group consisting of hydrogen, C₁-C₃-alkyl, allyl, hydroxy, C₁-C₃-alkoxy and benzyloxy;

k is 0 or 1,

A is selected from the group consisting of C₁-C₆-alkylene,

a substituted C₁-C₆-alkylene which may be substituted once or twice by C₁-C₃-alkyl, hydroxy, fluorine, or phenyl;

C₂-C₆-alkylene, wherein a methylene unit is isosterically replaced by O, S, NH, N(CH₃) or CO, wherein, with the exception of CO, the isosteric substitution is not adjacent to the amide group;

1,2-cyclopropylene;

C₂-C₆-alkenylene,

a substituted C₂-C₆-alkenylene which is substituted once or twice by C₁-C₃-alkyl, phenyl, hydroxy or fluorine;

C₄-C₆-alkadienylene,

a substituted C₄-C₆-alkadienylene which is substituted once or twice by methyl, or fluorine_{7i}

1,3,5-hexatrienylene,

a substituted 1,3,5-hexatrienylene, which is substituted by methyl or fluorine_{7i} and

ethynylene;

D is selected from the group consisting of

C₃-C₁₂-alkylene,

a substituted C₃-C₁₂-alkylene which is substituted once or twice by C₁-C₃-alkyl, hydroxy or phenyl_{7i}

C₃-C₁₂-alkenylene,

a substituted C₃-C₁₂-alkenylene which is substituted once or twice by C₁-C₃-alkyl, hydroxy or phenyl_{7i}

C₃-C₁₂-alkynylene,

a substituted C₃-C₁₂-alkynylene which is substituted once or twice by C₁-C₃-alkyl, hydroxy or phenyl_{7i} and

C₃-C₁₂-alkylene, C₃-C₁₂-alkenylene or C₃-C₁₂-alkynylene, wherein, one to three methylene units in the C₃-C₁₂-alkylene, C₃-C₁₂-alkenylene or C₃-C₁₂-alkynylene are isosterically replaced by O, S, NH, N(CH₃), N(COCH₃), N(SO₂CH₃), CO or SO₂;

G is selected from the group consisting of G¹, G², G³, G⁴, G⁵, and G⁶ wherein G must contain at least one aromatic ring, wherein

G^1 is $-(CR^9R^{10})_m-R^8$

and

m is 0 or 1,

R^8 is selected from the group consisting of benzyl, diphenylmethyl, phenyl, benzocyclobutyl, indanyl, indenyl, oxoindanyl, naphthyl, dihydronaphthyl, tetrahydronaphthyl, biphenylenyl, fluorenyl, oxofluorenyl, anthryl, dihydroanthryl, oxodihydroanthryl, dioxodihydroanthryl, phenanthryl, dibenzocycloheptenyl, dihydrodibenzocycloheptenyl, oxodihydrodibenzocyclooctenyl, and tetrahydrodibenzocyclooctenyl;

R^9 is selected from the group consisting of hydrogen, C_1 - C_6 -alkyl, C_3 - C_6 -alkenyl, C_2 - C_6 -alkinyl, benzyl, phenyl,

indanyl, indenyl, oxoindanyl, naphthyl, dihydronaphthyl, tetrahydronaphthyl, biphenylenyl, anthryl, dihydroanthryl, oxodihydroanthryl, phenanthryl, dibenzocycloheptenyl, dihydrodibenzocycloheptenyl, and oxodihydrodibenzocycloheptenyl,

R^{10} is the same as R^9 , but is selected independently thereof, or is hydroxy;

G^2 is $=CR^8R^9$

which is bound to D over a double bond, wherein R^8 and R^9 have the above meaning

G^3 is $-X-(CH_2)_n-(CR^9R^{10})_m-R^8$ or $-NR^8R^9$

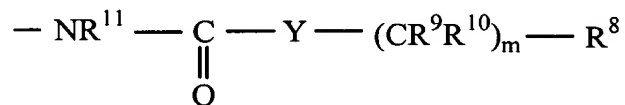
wherein m and the substituents R^8 , R^9 , and R^{10} have the above meanings, and

n is 0, 1 or 2,

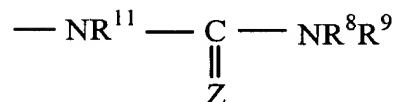
X is NR¹¹, O or S wherein

R¹¹ is selected from the group consisting of hydrogen, C₁-C₃-alkyl, allyl, propinyl, benzyl and phenyl,

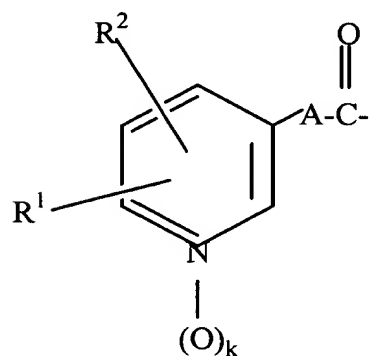
G⁴ is selected from the group consisting of



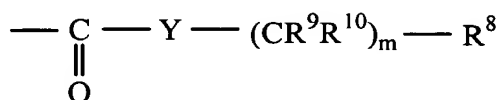
and



wherein structural element D-G does not contain a total of more than 1 amide group wherein m and the substituents R⁸, R⁹, R¹⁰, and R¹¹ can have the above meanings wherein the residues



and



are not identical,

Y is selected from the grouping consisting of methylene, ethylene, ethenylene, and a bond, and

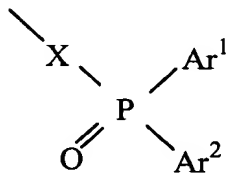
Z is O or S;

G⁵ is -NR¹¹-SO₂-R¹²

wherein R¹¹ has the above meaning, and

R¹² is selected from the group consisting of, phenyl, indenyl, naphthyl and anthryl;

G⁶ is



wherein X has the above meaning and

Ar¹ and Ar² are selected independently of each other from the group consisting of phenyl, and naphthyl;

and wherein aromatic ring systems in the substituents R¹, R³, R⁸, R⁹, R¹⁰, R¹¹, R¹², Ar¹ and Ar² and =CR⁸R⁹ may be substituted independently from each other by one to three of the same or different groups selected from the group consisting of halogen, cyano, C₁-C₆-alkyl, trifluoromethyl, C₃-C₈-cycloalkyl, benzyl, phenyl, hydroxy, C₁-C₆-hydroxyalkyl, C₁-C₆-alkoxy, C₁-C₆-alkoxy entirely or partially substituted by fluorine, benzyloxy, phenoxy, mercapto, C₁-C₆-alkylthio, phenylthio, sulfo, carboxy, C₂-C₇-carboxyalkyl, C₃-C₇-carboxyalkenyl, C₂-C₇-alkoxycarbonyl, benzyloxycarbonyl, nitro, amino, C₁-C₆-aminoalkyl, mono-C₁-C₆-alkylamino, di-(C₁-C₆-alkyl)amino and, for two adjacent residues on the aromatic ring, methylenedioxy,

wherein alkyl residues in the ~~Group~~ group G can be substituted by one or two of the same or different groups

selected from the group consisting of hydroxy, carboxy, C₂-C₇-alkoxycarbonyl, benzyloxycarbonyl, amino, mono-C₁-C₆-alkylamino and di-(C₁-C₆-alkyl)amino.

57. (currently amended) The compound according to claim 56 wherein

R¹ is selected from the group consisting of hydrogen, fluorine, chlorine, bromine, methyl, ethyl, trifluoromethyl, hydroxy, C₁-C₄-alkoxy, phenoxy, methylthio, ethylthio, methoxycarbonyl, aminocarbonyl and carboxy;

R² is selected from the group consisting of hydrogen, chlorine, methyl, hydroxy, and methoxy;

R³ is hydrogen;

k is 0;

A is selected from the group consisting of C₂-C₆-alkylene

a substituted C₂-C₆-alkylene which is substituted once or twice by hydroxy or fluorine; 1

C₂-C₆-alkylene, wherein a methylene unit is isosterically replaced by O, S, or CO, wherein, with the exception of CO, the isosteric substitution is not adjacent to the amide group; 1

C₂-C₆-alkenylene,

a substituted C₂-C₆-alkenylene which is substituted by methyl or fluorine; 1

C₄-C₆-alkadienylene,

a substituted C₄-C₆-alkadienylene which is substituted by methyl_{7,i} and

ethinylene;

D is selected from the group consisting of

C₃-C₁₀-alkylene,

a substituted C₃-C₁₀-alkylene which is substituted by methyl, hydroxy or phenyl_{7,i}

C₃-C₁₀-alkenylene,

a substituted C₃-C₁₀-alkenylene which is substituted by methyl, hydroxy or phenyl_{7,i}

C₃-C₁₀-alkinylene,

a substituted C₃-C₁₀-alkinylene which is substituted by hydroxy or phenyl_{7,i}

C₃-C₁₀-alkylene, C₃-C₁₀-alkenylene or C₃-C₁₀-alkinylene, wherein a methylene unit is isosterically replaced by O, NH, N(CH₃), or CO, or an ethylene group is isosterically replaced by a group NH-CO or CO-NH, or a propylene group is isosterically replaced by a group NH-CO-NH or NH-CO-O or O-CO-NH;

G is selected from the group consisting of G¹, G², G³, G⁴, G⁵, and G⁶ wherein G must contain at least one aromatic ring, wherein

G¹ is $-(CR^9R^{10})_m-R^8$

and

m is 0 or 1,

R⁸ is selected from the group consisting of benzyl, diphenylmethyl, phenyl, indanyl, indenyl, oxoindanyl, naphthyl, tetrahydronaphthyl, fluorenyl, oxofluorenyl, anthryl, dihydroanthryl, oxodihydroanthryl, phenanthryl, dibenzocycloheptenyl, dihydrodibenzocycloheptenyl, and oxodihydrodibenzocyclooctenyl;

R⁹ is selected from the group consisting of hydrogen and C₁-C₃-alkyl, benzyl, phenyl, indanyl, indenyl, naphthyl and anthryl;

R¹⁰ is the same as R⁹, but is selected independently thereof, or is hydroxy;

G² is =CR⁸R⁹

which is bound to D over a double bond, wherein R⁸ and R⁹ have the above meaning

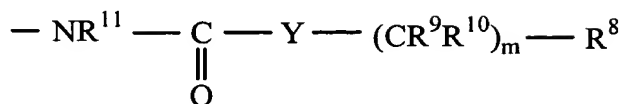
G³ is -X-(CH₂)_n-(CR⁹R¹⁰)_m-R⁸ or -NR⁸R⁹
wherein m and the substituents R⁸, R⁹, and R¹⁰ have the above meanings, and

n is 0 or 1,

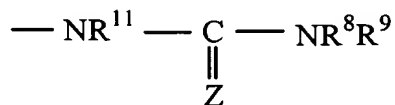
X is NR¹¹, O or S wherein

R¹¹ is selected from the group consisting of hydrogen, C₁-C₃-alkyl, benzyl and phenyl,

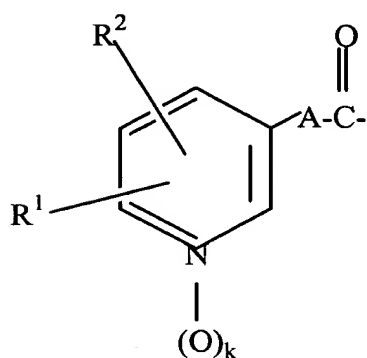
G⁴ is selected from the group consisting of



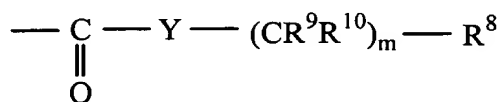
and



wherein structural element D-G does not contain a total of more than 1 amide grouping wherein m and the substituents R^8 , R^9 , R^{10} , and R^{11} can have the above meanings wherein the residues



and



are not identical,

Y is selected from the grouping consisting of methylene, ethenylene, and a bond, and

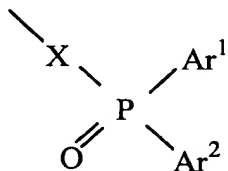
Z is O or S;

G^5 is $-NR^{11}-SO_2-R^{12}$

wherein R^{11} has the above meaning, and

R^{12} is selected from the group consisting of, phenyl, naphthyl, and anthryl;

G^6 is



wherein X has the above meaning and

Ar¹ and Ar² are selected independently of each other from the group consisting of phenyl, and naphthyl;

and wherein aromatic ring systems in the substituents R¹, R³, R⁸, R⁹, R¹⁰, R¹¹, R¹², Ar¹ and Ar² and =CR⁸R⁹ may be substituted independently from each other by one to three of the same or different groups selected from the group consisting of halogen, cyano, C₁-C₆-alkyl, trifluoromethyl, C₃-C₈-cycloalkyl, benzyl, phenyl, hydroxy, C₁-C₆-hydroxyalkyl, C₁-C₆-alkoxy, C₁-C₆-alkoxy entirely or partially substituted by fluorine, benzyloxy, phenoxy, mercapto, C₁-C₆-alkylthio, phenylthio, sulfo, carboxy, C₂-C₇-carboxyalkyl, C₃-C₇-carboxyalkenyl, C₂-C₇-alkoxycarbonyl, benzyloxycarbonyl, nitro, amino, C₁-C₆-aminoalkyl, mono-C₁-C₆-alkylamino, di-(C₁-C₆-alkyl)amino and, for two adjacent residues on the aromatic ring, and methylenedioxy.

58. (currently amended) The compound according to claim
57 wherein

R¹ is selected from the group consisting of hydrogen, fluorine, methyl, trifluoromethyl and ethylthio;

R² is hydrogen;

R³ is hydrogen;

k is 0;

A is selected from the group consisting of ethylene and butylene,

a substituted ethylene or butylene which is substituted by hydroxy or one or two fluorine atoms;

ethenylene and 1,3-butadienylene;

D is selected from the group consisting of

C₃-C₈-alkylene,

a substituted C₃-C₈-alkylene which is substituted by hydroxy or phenyl;

C₃-C₈-alkenylene,

a substituted C₃-C₈-alkenylene which is substituted by phenyl;

C₃-C₈-alkynylene; and

C₃-C₈-alkylene, C₃-C₈-alkenylene or C₃-C₈-alkynylene, wherein a methylene unit is isosterically replaced by O, NH or CO;

G is selected from the group consisting of

diphenylmethyl, diphenylhydroxymethyl, diphenylmethylenes, diphenylethylene, triphenylmethyl, naphthylmethylenes, naphthyl, tetrahydronaphthyl, hydroxytetrahydronaphthyl, dihydrodibenzocycloheptenyl, hydroxydihydrodibenzocycloheptenyl,

diphenylmethylamino, diphenylmethyl-methylamino,
dibenzylamino, benzylphenylamino,
triphenylmethylamino, biphenylamino, diphenylamino,
diphenylmethyloxy, diphenylmethylthio,

diphenylacetyl-amino, diphenylacetyl-phenylamino,
diphenylpropionylamino, diphenylacryloylamino,
naphthylacetyl-amino, benzoylamino, naphthoylamino,

diphenylmethylaminocarbonylamino,
dibenzylaminocarbonylamino,
naphthylmethylaminocarbonylamino,
biphenylaminocarbonylamino, naphthylaminocarbonylamino,
benzylphenylaminocarbonylamino,
diphenylaminocarbonylamino, diphenylaminocarbonyl-
phenylamino,

tolylsulfonylamino, naphthylsulfonylamino,
diphenylphosphinoylamino and diphenylphosphinoxyloxy,

and wherein aromatic ring systems in G can be substituted independently from each other by one to three groups independently selected from the group consisting of halogen, cyano, C₁-C₆-alkyl, trifluoromethyl, C₃-C₈-cycloalkyl, benzyl, phenyl, hydroxy, C₁-C₆-hydroxyalkyl, C₁-C₆-alkoxy, C₁-C₆-alkoxy entirely or partially substituted by fluorine, benzyloxy, phenoxy, mercapto, C₁-C₆-alkylthio, phenylthio, sulfo, carboxy, C₂-C₇-carboxyalkyl, C₃-C₇-carboxyalkenyl, C₂-C₇-alkoxycarbonyl, benzyloxycarbonyl, nitro, amino, C₁-C₆-aminoalkyl, mono-C₁-C₆-alkylamino, di-(C₁-C₆-alkyl)amino and, for two adjacent residues on the aromatic ring, methylenedioxy and

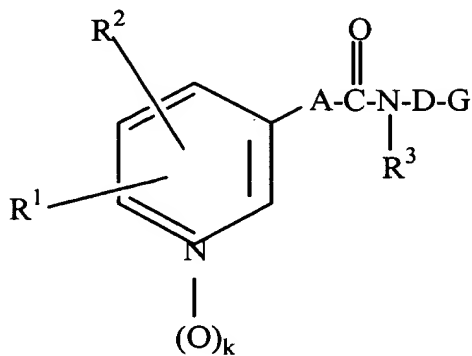
wherein alkyl residues in the ~~Group~~ group G can be substituted by one or two of the same or different groups

selected from the group consisting of hydroxy, carboxy, C₂-C₇-alkoxycarbonyl, benzyloxycarbonyl, amino, mono-C₁-C₆-alkylamino and di-(C₁-C₆-alkyl)amino.

59. (currently amended) The compound of formula (I) of claim 55, wherein the compound is selected from the group consisting of

N-[8,8-bis-(4-fluorophenyl)-octyl]-3-pyridin-3-yl-acryl-
~~amidine hydrochloride~~ amide hydrochloride,
N-[6-(3,3-diphenyl-ureido)-hexyl]-3-pyridin-3-yl-
acrylamide, N-(8,8-diphenyl-octyl)-3-pyridin-3-yl-
acrylamide, N-(8-hydroxy-8,8-diphenyl-octyl)-3-pyridin-3-
yl-acrylamide, N-[4-(3,3-diphenyl-ureido)-butyl]-3-
pyridin-3-yl-acrylamide, N-(6-hydroxy-6,6-diphenyl-hexyl)-
3-pyridin-3-yl-acrylamide, N-(6,6-diphenyl-hex-5-enyl)-3-
pyridin-3-yl-acrylamide, N-(5-hydroxy-5,5-diphenyl-
pentyl)-3-pyridin-3-yl-acrylamide, N-(7-phenyl-heptyl)-3-
pyridin-3-yl-acrylamide, N-(4-diphenylacetyl-amino-butyl)-
3-pyridin-3-yl-acrylamide, and N-[4-(benzhydryl-amino)-
butyl]-3-pyridin-3-yl-acrylamide.

60. (currently amended) A pharmaceutical composition comprising one or more of the compounds according to formula (I) and pharmaceutically acceptable salts of formula (I)



(I)

wherein

R^1 is selected from the group consisting of hydrogen, halogen, cyano, C_1 - C_6 -alkyl, C_3 - C_6 -alkenyl, C_2 - C_6 -alkinyl, trifluoromethyl, C_3 - C_8 -cycloalkyl, C_1 - C_6 -hydroxyalkyl, hydroxy, C_1 - C_6 -alkoxy, C_3 - C_8 -cycloalkyloxy, benzyloxy, C_1 - C_7 -alkanoyloxy, C_1 - C_6 -alkylthio, C_2 - C_7 -alkoxycarbonyl, aminocarbonyl, C_2 - C_7 -alkylaminocarbonyl, C_3 - C_{13} -dialkylaminocarbonyl, carboxy, phenyl, phenoxy, phenylthio, pyridyloxy, pyridylthio, and NR^4R^5 , wherein

R^4 and R^5 are selected independently of each other from the group consisting of hydrogen, C_1 - C_6 -alkyl, C_3 - C_6 -alkenyl, C_3 - C_6 -alkinyl, benzyl and phenyl;

R^2 is selected from the group consisting of hydrogen, halogen, cyano, C_1 - C_6 -alkyl, trifluoromethyl, hydroxy, C_1 - C_6 -alkoxy and benzyloxy;

R^3 is selected from the group consisting of hydrogen, C_1 - C_6 -alkyl, C_3 - C_6 -alkenyl, C_3 - C_6 -alkinyl, hydroxy, C_1 - C_6 -alkoxy and benzyloxy;

k is 0 or 1,

A is selected from the group consisting of C_1 - C_6 -alkylene,

a substituted C₁-C₆-alkylene which may be substituted one to three-fold by C₁-C₃-alkyl, hydroxy, C₁-C₃-alkoxy, fluorine, or phenyl;_i

C₂-C₆-alkylene, in which a methylene unit is isosterically replaced by O, S, NR⁶, CO, SO or SO₂, wherein, with the exception of CO, the isosteric substitution is not adjacent to the amide group and R⁶ is selected from the group consisting of hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₁-C₆-acyl, and C₁-C₆-alkanesulfonyl;_i

1,2-cyclopropylene;_i

C₂-C₆-alkenylene,

a substituted C₂-C₆-alkenylene which is substituted once or twice by C₁-C₃-alkyl, hydroxy, C₁-C₃-alkoxy, fluorine, cyano or phenyl;_i

C₄-C₆-alkadienylene,

a substituted C₄-C₆-alkadienylene which is substituted once or twice by C₁-C₃-alkyl, fluorine, cyano or phenyl;_i

1,3,5-hexatrienylene,

a substituted 1,3,5-hexatrienylene, which is substituted by C₁-C₃-alkyl, fluorine, cyano or phenyl;_i and

ethynylene,

D is selected from the group consisting of

C₃-C₁₂-alkylene,

a substituted C₃-C₁₂-alkylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl_{7i}

C₃-C₁₂-alkenylene,

a substituted C₃-C₁₂-alkenylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl_{7i}

C₅-C₁₂-alkadienylene,

a substituted C₅-C₁₂-alkadienylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl_{7i}

C₃-C₁₂-alkinylene,

a substituted C₃-C₁₂-alkinylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl_{7i}

C₅-C₁₂-alkeninylene,

a substituted C₅-C₁₂-alkeninylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl_{7i}
and

C₃-C₁₂-alkylene, C₃-C₁₂-alkenylene or C₃-C₁₂-alkinylene, wherein, with the exception of the (G)-terminal methylene group in the C₃-C₁₂-alkylene, C₃-C₁₂-alkenylene or C₃-C₁₂-alkinylene, one to three methylene units in the C₃-C₁₂-alkylene, C₃-C₁₂-alkenylene or C₃-C₁₂-alkinylene are isosterically replaced by O, S, NR⁷, CO, SO or SO₂, wherein R⁷ has the same meaning as R⁶, but is selected independently thereof;

R^{10} is the same as R^9 , but is selected independently thereof, or is hydroxy;

G is selected from the group consisting of G^1 , G^2 , G^3 , G^4 , G^5 , and G^6 wherein G must contain at least one aromatic ring, wherein

G^1 is $-(CR^9R^{10})_m-R^8$

and

m is 0 or 1,

R^8 is selected from the group consisting of benzyl, diphenylmethyl, phenyl,

anellated bi- and tricyclic aromatic or partially hydrogenated carbocyclic ring systems with 8 to 18 ring atoms, and at least one aromatic ring, wherein the linkage can occur over an aromatic or a hydrogenated ring and either directly or over a methylene group;

R^9 is selected from the group consisting of hydrogen, C_1 - C_6 -alkyl, C_3 - C_6 -alkenyl, C_2 - C_6 -alkinyl, benzyl, phenyl,

anellated bi- and tricyclic aromatic ring systems with 8 to 18 ring atoms, and at least one aromatic ring, wherein the linkage can occur over an aromatic ring and either directly or over a methylene group;

R^{10} is the same as R^9 , but is selected independently thereof, or is hydroxy;

G^2 is $=CR^8R^9$

which is bound to D by means of a double bond, wherein R⁸ and R⁹ have the above meaning;

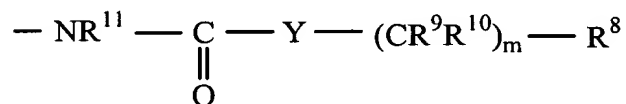
G³ is -X-(CH₂)_n-(CR⁹R¹⁰)_m-R⁸ or -NR⁸R⁹ wherein m and the substituents R⁸, R⁹, and R¹⁰ have the above meanings, and

n is 0, 1 or 2

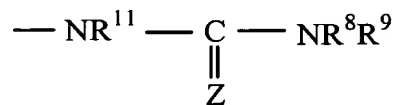
X is NR¹¹, O or S wherein

R¹¹ has the same meanings as R⁴, but is selected independently thereof,

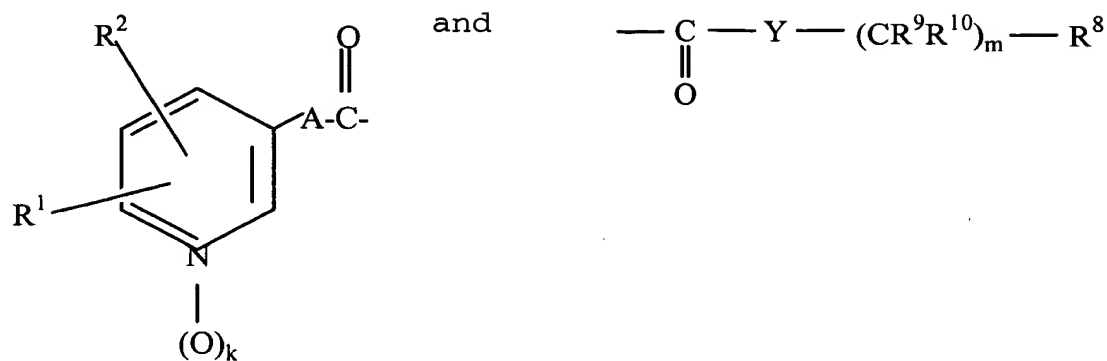
G⁴ is selected from the group consisting of



and



wherein structural element D-G cannot contain a total of more than 1 amide grouping, wherein m and the substituents R⁸, R⁹, R¹⁰, and R¹¹ can have the above meaning, wherein the residues



are not identical, and

Y is selected from the grouping consisting of methylene, ethylene, ethenylene, or represents a bond, and

Z is O or S;

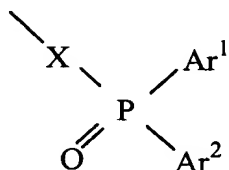
G⁵ is $-\text{NR}^{11}-\text{SO}_2-\text{R}^{12}$

wherein R¹¹ has the above meaning, and

R¹² is selected from the group consisting of C₁-C₆-alkyl and phenyl,

anellated bi- and tricyclic aromatic or partially hydrogenated carbocyclic ring systems with 8 to 18 ring atoms, and at least an aromatic ring, wherein the linkage can occur over an aromatic or hydrogenated ring,

G⁶ is



wherein X has the above meaning and

Ar¹ and Ar² are selected independently of each other from the group consisting of phenyl, pyridyl and naphthyl; and wherein aromatic ring systems in the substituents R¹, R², R³, R⁴, R⁵, R⁸, R⁹, R¹⁰, R¹¹, R¹², Ar¹ and Ar² and in ring =CR⁸R⁹ may be substituted independently from each other by one to three of the same or different groups independently selected from the group consisting of halogen, cyano, C₁-C₆-alkyl, trifluoromethyl, C₃-C₈-cycloalkyl, benzyl, phenyl, hydroxy, C₁-C₆-hydroxyalkyl, C₁-C₆-alkoxy, C₁-C₆-alkoxy entirely or partially substituted by fluorine, benzyloxy, phenoxy, mercapto, C₁-C₆-alkylthio, phenylthio, sulfo, carboxy, C₂-C₇-carboxyalkyl, C₃-C₇-carboxyalkenyl, C₂-C₇-alkoxycarbonyl, benzyloxycarbonyl, nitro, amino, C₁-C₆-aminoalkyl, mono-C₁-C₆-alkylamino, di-(C₁-C₆-alkyl)amino and, for two adjacent residues on the aromatic ring, methylenedioxy and

wherein alkyl residues in the ~~Group~~ group G can be substituted by one or two of the same or different groups selected from the group consisting of hydroxy, carboxy, C₂-C₇-alkoxycarbonyl, benzyloxycarbonyl, amino, mono-C₁-C₆-alkylamino and di-(C₁-C₆-alkyl)amino;

the cis- and trans-isomers, E- and Z-isomers including the corresponding enantiomers, diastereomers and other isomers, the tautomers and their acid addition salts including their hydrates and solvates, wherein if R¹, R² and R³ are hydrogen, A is not -CH=CH-, D is not -(CH₂)₅- and G is not -N(C₂H₅)-CH₂-phenyl, wherein if R¹, R² and R³ are hydrogen, A is not -CH=CH-, D is not -(CH₂)₅-N(CH₂CH₃)-CH₂- and G is not phenyl.

61. (previously presented) The pharmaceutical composition of claim 60 wherein the composition is provided in a form selected from the group consisting of solid, peroral

administrable form as a tablet, capsule, coated tablet, liquid, gastric fluid-resistant preparation, suspension, effervescent tablet, tabs or sachets, sustained action form, parenteral depot medicinal form, implant, inhalant, concentrate, powder, rectal administrable emulsion, genital administrable emulsion, transurethral administrable emulsion, liposomal administrable emulsion, lyophilisate, spray, transdermal, salve, emulsion, balm, plaster and mixtures thereof.

62. (previously presented) The pharmaceutical composition of claim 60 wherein a dosage unit for administration includes 0.001 to 5000 mg active ingredient.

63. (previously presented) The pharmaceutical composition of claim 62 wherein a dosage unit for administration includes 0.001 to 4000 mg active ingredient.

64. (previously presented) The pharmaceutical composition of claim 63 wherein a dosage unit for administration includes 0.001 to 3000 mg active ingredient.

65. (previously presented) The pharmaceutical composition of claim 64 wherein a dosage unit for administration includes 0.001 to 2000 mg active ingredient.

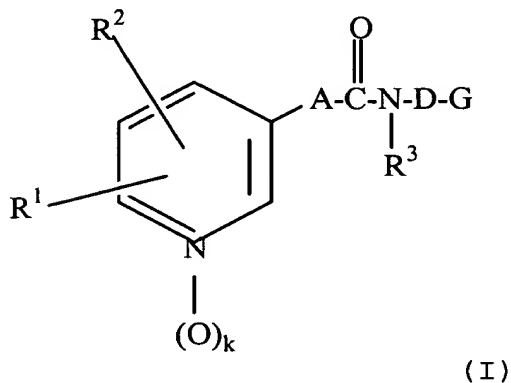
66. (previously presented) The pharmaceutical composition of claim 65 wherein a dosage unit for administration includes 0.001 to 1000 mg active ingredient.

67. (previously presented) The pharmaceutical composition of claim 66 wherein a dosage unit for administration includes 0.01 to 100 mg active ingredient.

68. (previously presented) The pharmaceutical composition of claim 67 wherein a dosage unit for administration includes 1 to 10 mg active ingredient.

69. (previously presented) The pharmaceutical composition of claim 66 wherein a dosage unit for administration includes 1, 2, 5, 10, 20, 25, 30, 50, 100, 200, 300, 400, 500, 600 or 800 mg active ingredient.

70. (currently amended) A method of inhibiting tumor cell growth in a human or animal body comprising administering to the human or animal body in need thereof an amount of a pharmaceutical composition effective for inhibiting tumor cell growth, wherein the method is effective for inhibiting tumors selected from the group consisting of gynecological tumors, ovarian carcinomas, testicle tumors, esophagus carcinomas, stomach cancer, rectal carcinomas, pancreas carcinomas, thyroid cancer, adrenal tumors, leukemia, lymphomas, Hodgkin's disease, CNS tumors, soft-tissue sarcomas, bone sarcomas, benign and malignant mestheliomas, intestine tumors, liver tumors, breast tumors, bronchial and lung carcinomas, melanomas, and benign papillomatosis tumors, wherein the pharmaceutical composition includes compounds of formula (I) or a pharmaceutically acceptable salts of formula (I)



wherein

R¹ is selected from the group consisting of hydrogen, halogen, cyano, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₂-C₆-alkinyl, trifluoromethyl, C₃-C₈-cycloalkyl, C₁-C₆-hydroxyalkyl, hydroxy, C₁-C₆-alkoxy, C₃-C₈-cycloalkyloxy, benzyloxy, C₁-C₇-alkanoyloxy, C₁-C₆-alkylthio, C₂-C₇-alkoxycarbonyl, aminocarbonyl, C₂-C₇-alkylaminocarbonyl, C₃-C₁₃-dialkylaminocarbonyl, carboxy, phenyl, phenoxy, phenylthio, pyridyloxy, pyridylthio, and NR⁴R⁵, wherein

R⁴ and R⁵ are selected independently of each other from the group consisting of hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₃-C₆-alkinyl, benzyl and phenyl;

R² is selected from the group consisting of hydrogen, halogen, cyano, C₁-C₆-alkyl, trifluoromethyl, hydroxy, C₁-C₆-alkoxy and benzyloxy;

R³ is selected from the group consisting of hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₃-C₆-alkinyl, hydroxy, C₁-C₆-alkoxy and benzyloxy;

k is 0 or 1,

A is selected from the group consisting of C₁-C₆-alkylene,

a substituted C₁-C₆-alkylene which may be substituted one to three-fold by C₁-C₃-alkyl, hydroxy, C₁-C₃-alkoxy, fluorine, or phenyl;

C₂-C₆-alkylene, in which a methylene unit is isosterically replaced by O, S, NR⁶, CO, SO or SO₂, wherein, with the exception of CO, the isosteric substitution is not adjacent to the amide group and R⁶ is selected from the group consisting of hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₁-C₆-acyl, and C₁-C₆-alkanesulfonyl;

1,2-cyclopropylene_{7i}

C₂-C₆-alkenylene,

a substituted C₂-C₆-alkenylene which is substituted once or twice by C₁-C₃-alkyl, hydroxy, C₁-C₃-alkoxy, fluorine, cyano or phenyl_{7i}

C₄-C₆-alkadienylene,

a substituted C₄-C₆-alkadienylene which is substituted once or twice by C₁-C₃-alkyl, fluorine, cyano or phenyl_{7i}

1,3,5-hexatrienylene,

a substituted 1,3,5-hexatrienylene, which is substituted by C₁-C₃-alkyl, fluorine, cyano or phenyl_{7i} and

ethynylene,

D is selected from the group consisting of

C₃-C₁₂-alkylene,

a substituted C₃-C₁₂-alkylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl_{7i}

C₃-C₁₂-alkenylene,

a substituted C₃-C₁₂-alkenylene which is substituted once or twice by C₁-C₆- alkyl, hydroxy, C₁-C₆-alkoxy or phenyl_{7i}

C₅-C₁₂-alkadienylene,

a substituted C₅-C₁₂-alkadienylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl;_i

C₃-C₁₂-alkynylene,

a substituted C₃-C₁₂-alkynylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl;_i

C₅-C₁₂-alkeninylene,

a substituted C₅-C₁₂-alkeninylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl, and

C₃-C₁₂-alkylene, C₃-C₁₂-alkenylene or C₃-C₁₂-alkynylene, wherein, with the exception of the (G)-terminal methylene group in the C₃-C₁₂-alkylene, C₃-C₁₂-alkenylene or C₃-C₁₂-alkynylene, one to three methylene units in the C₃-C₁₂-alkylene, C₃-C₁₂-alkenylene or C₃-C₁₂-alkynylene are isosterically replaced by O, S, NR⁷, CO, SO or SO₂, wherein R⁷ has the same meaning as R⁶, but is selected independently thereof;

G is selected from the group consisting of G¹, G², G³, G⁴, G⁵, and G⁶ wherein G must contain at least one aromatic ring, wherein

G¹ is $-(CR^9R^{10})_m-R^8$

and

m is 0 or 1,

R⁸ is selected from the group consisting of benzyl, diphenylmethyl, phenyl,

anellated bi- and tricyclic aromatic or partially hydrogenated carbocyclic ring systems with 8 to 18 ring atoms, and at least one aromatic ring, wherein the linkage can occur over an aromatic or a hydrogenated ring and either directly or over a methylene group;

R⁹ is selected from the group consisting of hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₂-C₆-alkinyl, benzyl, phenyl,

anellated bi- and tricyclic aromatic ring systems with 8 to 18 ring atoms, and at least one aromatic ring, wherein the linkage can occur over an aromatic ring and either directly or over a methylene group;

R¹⁰ is the same as R⁹, but is selected independently thereof, or is hydroxy;

G² is =CR⁸R⁹

which is bound to D by means of a double bond, wherein R⁸ and R⁹ have the above meaning;

G³ is -X-(CH₂)_n-(CR⁹R¹⁰)_m-R⁸ or -NR⁸R⁹

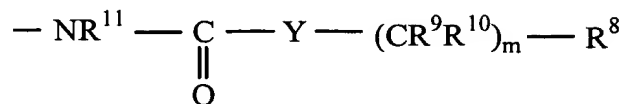
wherein m and the substituents R⁸, R⁹, and R¹⁰ have the above meanings, and

n is 0, 1 or 2

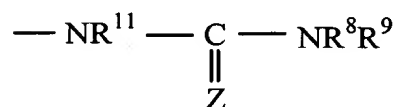
X is NR¹¹, O or S wherein

R¹¹ has the same meaning as R⁴, but is selected independently thereof,

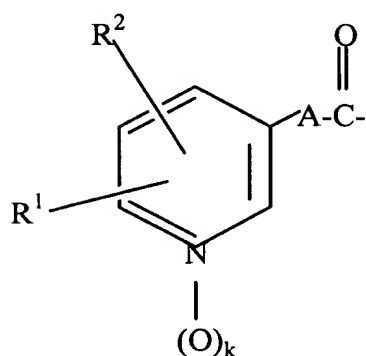
G⁴ is selected from the group consisting of



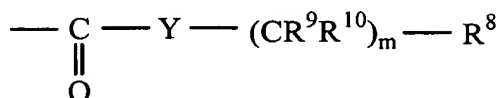
and



wherein structural element D-G cannot contain a total of more than 1 amide grouping, wherein m and the substituents R⁸, R⁹, R¹⁰, and R¹¹ can have the above meaning, wherein the residues



and



are not identical, and

Y is selected from the grouping consisting of methylene, ethylene, ethenylene, or represents a bond, and

Z is O or S;

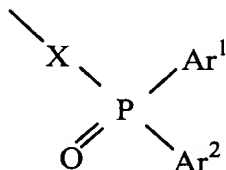
G⁵ is $-NR^{11}-SO_2-R^{12}$

wherein R¹¹ has the above meaning, and

R¹² is selected from the group consisting of C₁-C₆-alkyl and phenyl,

anellated bi- and tricyclic aromatic or partially hydrogenated carbocyclic ring systems with 8 to 18 ring atoms, and at least an aromatic ring, wherein the linkage can occur over an aromatic or hydrogenated ring,

G⁶ is



wherein X has the above meaning and

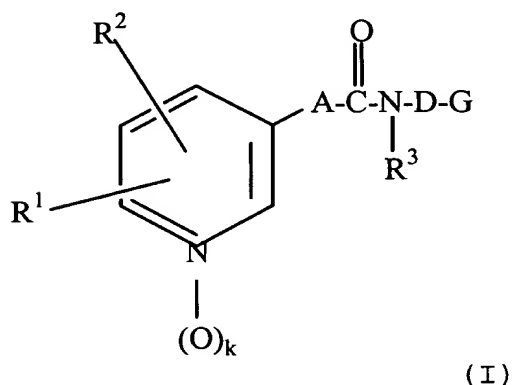
Ar¹ and Ar² are selected independently of each other from the group consisting of phenyl, pyridyl and naphthyl;

and wherein aromatic ring systems in the substituents R¹, R², R³, R⁴, R⁵, R⁸, R⁹, R¹⁰, R¹¹, R¹², Ar¹ and Ar² and =CR⁸R⁹ may be substituted independently from each other by one to three of the same or different groups independently selected from the group consisting of halogen, cyano, C₁-C₆-alkyl, trifluoromethyl, C₃-C₈-cycloalkyl, benzyl, phenyl, hydroxy, C₁-C₆-hydroxyalkyl, C₁-C₆-alkoxy, C₁-C₆-alkoxy entirely or partially substituted by fluorine, benzyloxy, phenoxy, mercapto, C₁-C₆-alkylthio, phenylthio, sulfo, carboxy, C₂-C₇-carboxyalkyl, C₃-C₇-carboxyalkenyl, C₂-C₇-alkoxycarbonyl, benzyloxycarbonyl, nitro, amino, C₁-C₆-aminoalkyl, mono-C₁-C₆-alkylamino, di-(C₁-C₆-alkyl)amino and, for two adjacent residues on the aromatic ring, methylenedioxy and

wherein alkyl residues in the ~~Group~~ group G can be substituted by one or two of the same or different groups selected from the group consisting of hydroxy, carboxy, C₂-C₇-alkoxycarbonyl, benzyloxycarbonyl, amino, mono-C₁-C₆-alkylamino and di-(C₁-C₆-alkyl)amino;

the cis- and trans-isomers, E- and Z-isomers including the corresponding enantiomers, diastereomers and other isomers, the tautomers and their acid addition salts including their hydrates and solvates.

71. (currently amended) A method of suppressing autoimmune disease in a human or animal body comprising administering to the human or animal body in need thereof an amount of a pharmaceutical composition effective for suppressing autoimmune disease, wherein the pharmaceutical composition includes compounds of formula (I) or pharmaceutically acceptable salts of formula (I)



wherein

R¹ is selected from the group consisting of hydrogen, halogen, cyano, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₂-C₆-alkinyl, trifluoromethyl, C₃-C₈-cycloalkyl, C₁-C₆-hydroxyalkyl, hydroxy, C₁-C₆-alkoxy, C₃-C₈-cycloalkyloxy, benzyloxy, C₁-C₇-alkanoyloxy, C₁-C₆-alkylthio, C₂-C₇-alkoxycarbonyl, aminocarbonyl, C₂-C₇-alkylaminocarbonyl, C₃-C₁₃-

dialkylaminocarbonyl, carboxy, phenyl, phenoxy, phenylthio, pyridyloxy, pyridylthio, and NR^4R^5 , wherein

R^4 and R^5 are selected independently of each other from the group consisting of hydrogen, $\text{C}_1\text{-C}_6\text{-alkyl}$, $\text{C}_3\text{-C}_6\text{-alkenyl}$, $\text{C}_3\text{-C}_6\text{-alkinyl}$, benzyl and phenyl;

R^2 is selected from the group consisting of hydrogen, halogen, cyano, $\text{C}_1\text{-C}_6\text{-alkyl}$, trifluoromethyl, hydroxy, $\text{C}_1\text{-C}_6\text{-alkoxy}$ and benzyloxy;

R^3 is selected from the group consisting of hydrogen, $\text{C}_1\text{-C}_6\text{-alkyl}$, $\text{C}_3\text{-C}_6\text{-alkenyl}$, $\text{C}_3\text{-C}_6\text{-alkinyl}$, hydroxy, $\text{C}_1\text{-C}_6\text{-alkoxy}$ and benzyloxy;

k is 0 or 1,

A is selected from the group consisting of $\text{C}_1\text{-C}_6\text{-alkylene}$, a substituted $\text{C}_1\text{-C}_6\text{-alkylene}$ which may be substituted one to three-fold by $\text{C}_1\text{-C}_3\text{-alkyl}$, hydroxy, $\text{C}_1\text{-C}_3\text{-alkoxy}$, fluorine, or phenyl;

$\text{C}_2\text{-C}_6\text{-alkylene}$, in which a methylene unit is isosterically replaced by O , S , NR^6 , CO , SO or SO_2 , wherein, with the exception of CO , the isosteric substitution is not adjacent to the amide group and R^6 is selected from the group consisting of hydrogen, $\text{C}_1\text{-C}_6\text{-alkyl}$, $\text{C}_3\text{-C}_6\text{-alkenyl}$, $\text{C}_1\text{-C}_6\text{-acyl}$, and $\text{C}_1\text{-C}_6\text{-alkanesulfonyl}$;

1,2-cyclopropylene;

$\text{C}_2\text{-C}_6\text{-alkenylene}$,

a substituted C₂-C₆-alkenylene which is substituted once or twice by C₁-C₃-alkyl, hydroxy, C₁-C₃-alkoxy, fluorine, cyano or phenyl_{7i}

C₄-C₆-alkadienylene,

a substituted C₄-C₆-alkadienylene which is substituted once or twice by C₁-C₃-alkyl, fluorine, cyano or phenyl_{7i}

1,3,5-hexatrienylene,

a substituted 1,3,5-hexatrienylene, which is substituted by C₁-C₃-alkyl, fluorine, cyano or phenyl_{7i} and

ethinylene,

D is selected from the group consisting of

C₃-C₁₂-alkylene,

a substituted C₃-C₁₂-alkylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl_{7i}

C₃-C₁₂-alkenylene,

a substituted C₃-C₁₂-alkenylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl_{7i}

C₅-C₁₂-alkadienylene,

a substituted C₅-C₁₂-alkadienylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl_{7i}

C₃-C₁₂-alkinylene,

a substituted C₃-C₁₂-alkynylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl;
i

C₅-C₁₂-alkeninylene,

a substituted C₅-C₁₂-alkeninylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl;
i
and

C₃-C₁₂-alkylene, C₃-C₁₂-alkenylene or C₃-C₁₂-alkynylene, wherein, with the exception of the (G)-terminal methylene group in the C₃-C₁₂-alkylene, C₃-C₁₂-alkenylene or C₃-C₁₂-alkynylene, one to three methylene units in the C₃-C₁₂-alkylene, C₃-C₁₂-alkenylene or C₃-C₁₂-alkynylene are isosterically replaced by O, S, NR⁷, CO, SO or SO₂, wherein R⁷ has the same meaning as R⁶, but is selected independently thereof;

G is selected from the group consisting of G¹, G², G³, G⁴, G⁵, and G⁶ wherein G must contain at least one aromatic ring, wherein

G¹ is $-(CR^9R^{10})_m-R^8$

and

m is 0 or 1,

R⁸ is selected from the group consisting of benzyl, diphenylmethyl, phenyl,

anellated bi- and tricyclic aromatic or partially hydrogenated carbocyclic ring systems with 8 to 18 ring atoms, and at least one aromatic ring, wherein the linkage

can occur over an aromatic or a hydrogenated ring and either directly or over a methylene group;

R⁹ is selected from the group consisting of hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₂-C₆-alkinyl, benzyl, phenyl,

anellated bi- and tricyclic aromatic ring systems with 8 to 18 ring atoms, and at least one aromatic ring, wherein the linkage can occur over an aromatic ring and either directly or over a methylene group;

R¹⁰ is the same as R⁹, but is selected independently thereof, or is hydroxy;

G² is =CR⁸R⁹

which is bound to D by means of a double bond, wherein R⁸ and R⁹ have the above meaning;

G³ is -X-(CH₂)_n-(CR⁹R¹⁰)_m-R⁸ or -NR⁸R⁹

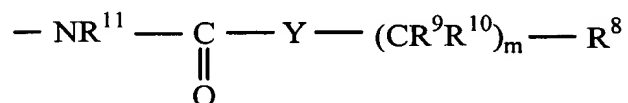
wherein m and the substituents R⁸, R⁹, and R¹⁰ have the above meanings, and

n is 0, 1 or 2

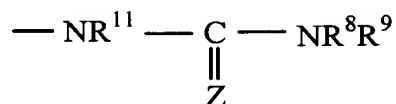
X is NR¹¹, O or S wherein

R¹¹ has the same meaning as R⁴, but is selected independently thereof,

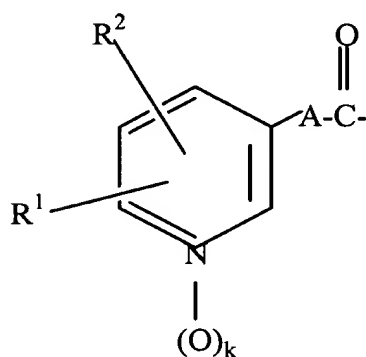
G⁴ is selected from the group consisting of



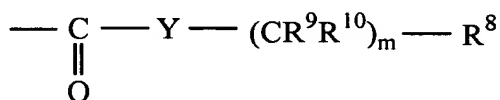
and



wherein structural element D-G cannot contain a total of more than 1 amide grouping, wherein m and the substituents R⁸, R⁹, R¹⁰, and R¹¹ can have the above meaning, wherein the residues



and



are not identical, and

Y is selected from the grouping consisting of methylene, ethylene, ethenylene, or represents a bond, and

Z is O or S;

G⁵ is —NR¹¹—SO₂—R¹²

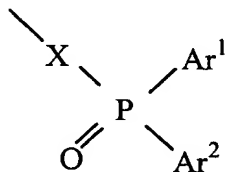
wherein R¹¹ has the above meaning, and

R¹² is selected from the group consisting of C₁–C₆–alkyl and phenyl,

anellated bi- and tricyclic aromatic or partially hydrogenated carbocyclic ring systems with 8 to 18 ring

atoms, and at least an aromatic ring, wherein the linkage can occur over an aromatic or hydrogenated ring,

G⁶ is



wherein X has the above meaning and

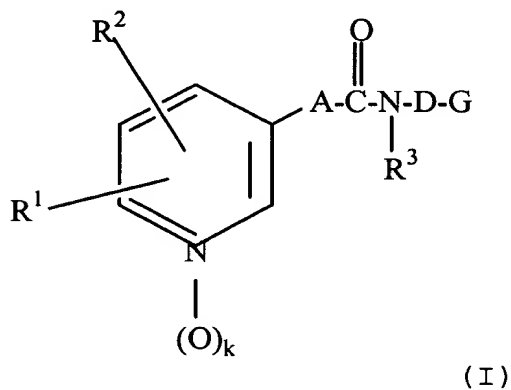
Ar¹ and Ar² are selected independently of each other from the group consisting of phenyl, pyridyl and naphthyl;

and wherein aromatic ring systems in the substituents R¹, R², R³, R⁴, R⁵, R⁸, R⁹, R¹⁰, R¹¹, R¹², Ar¹ and Ar² and =CR⁸R⁹ may be substituted independently from each other by one to three of the same or different groups independently selected from the group consisting of halogen, cyano, C₁-C₆-alkyl, trifluoromethyl, C₃-C₈-cycloalkyl, benzyl, phenyl, hydroxy, C₁-C₆-hydroxyalkyl, C₁-C₆-alkoxy, C₁-C₆-alkoxy entirely or partially substituted by fluorine, benzyloxy, phenoxy, mercapto, C₁-C₆-alkylthio, phenylthio, sulfo, carboxy, C₂-C₇-carboxyalkyl, C₃-C₇-carboxyalkenyl, C₂-C₇-alkoxycarbonyl, benzyloxycarbonyl, nitro, amino, C₁-C₆-aminoalkyl, mono-C₁-C₆-alkylamino, di-(C₁-C₆-alkyl)amino and, for two adjacent residues on the aromatic ring, methylenedioxy and

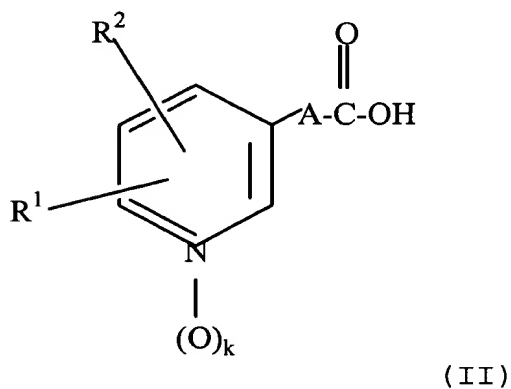
wherein alkyl residues in the ~~Group~~ group G can be substituted by one or two of the same or different groups selected from the group consisting of hydroxy, carboxy, C₂-C₇-alkoxycarbonyl, benzyloxycarbonyl, amino, mono-C₁-C₆-alkylamino and di-(C₁-C₆-alkyl)amino;

the cis- and trans-isomers, E- and Z-isomers including the corresponding enantiomers, diastereomers and other isomers, the tautomers and their acid addition salts including their hydrates and solvates.

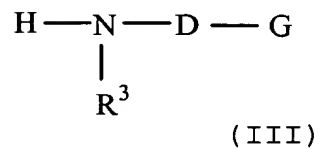
72. (currently amended) A method for the production of a compound of formula (I)



the method comprising reacting a compound of formula (II)



with compounds of formula (III)



in an inert solvent or polar aprotic solvent or solvent mixture or in the presence of auxiliary base in the form of a carbonate or organic amine at a reaction temperature between -40°C and 180°C,

wherein

R¹ is selected from the group consisting of hydrogen, halogen, cyano, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₂-C₆-alkinyl, trifluoromethyl, C₃-C₈-cycloalkyl, C₁-C₆-hydroxyalkyl, hydroxy, C₁-C₆-alkoxy, C₃-C₈-cycloalkyloxy, benzyloxy, C₁-C₇-alkanoyloxy, C₁-C₆-alkylthio, C₂-C₇-alkoxycarbonyl, aminocarbonyl, C₂-C₇-alkylaminocarbonyl, C₃-C₁₃-dialkylaminocarbonyl, carboxy, phenyl, phenoxy, phenylthio, pyridyloxy, pyridylthio, and NR⁴R⁵, wherein

R⁴ and R⁵ are selected independently of each other from the group consisting of hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₃-C₆-alkinyl, benzyl and phenyl;

R² is selected from the group consisting of hydrogen, halogen, cyano, C₁-C₆-alkyl, trifluoromethyl, hydroxy, C₁-C₆-alkoxy and benzyloxy;

R³ is selected from the group consisting of hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₃-C₆-alkinyl, hydroxy, C₁-C₆-alkoxy and benzyloxy;

k is 0 or 1,

A is selected from the group consisting of C₁-C₆-alkylene,

a substituted C₁-C₆-alkylene which may be substituted one to three-fold by C₁-C₃-alkyl, hydroxy, C₁-C₃-alkoxy, fluorine, or phenyl;

C₂-C₆-alkylene, in which a methylene unit is isosterically replaced by O, S, NR⁶, CO, SO or SO₂, wherein, with the exception of CO, the isosteric substitution is not adjacent to the amide group and R⁶ is selected from the group consisting of hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₁-C₆-acyl, and C₁-C₆-alkanesulfonyl;

1,2-cyclopropylene;

C₂-C₆-alkenylene,

a substituted C₂-C₆-alkenylene which is substituted once or twice by C₁-C₃-alkyl, hydroxy, C₁-C₃-alkoxy, fluorine, cyano or phenyl;

C₄-C₆-alkadienylene,

a substituted C₄-C₆-alkadienylene which is substituted once or twice by C₁-C₃-alkyl, fluorine, cyano or phenyl;

1,3,5-hexatrienylene,

a substituted 1,3,5-hexatrienylene, which is substituted by C₁-C₃-alkyl, fluorine, cyano or phenyl; and

ethynylene,

D is selected from the group consisting of

C₃-C₁₂-alkylene,

a substituted C₃-C₁₂-alkylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl;

C₃-C₁₂-alkenylene,

a substituted C₃-C₁₂-alkenylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl;

C₅-C₁₂-alkadienylene,

a substituted C₅-C₁₂-alkadienylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl;

C₃-C₁₂-alkinylene,

a substituted C₃-C₁₂-alkinylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl;

C₅-C₁₂-alkeninylene,

a substituted C₅-C₁₂-alkeninylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl; and

C₃-C₁₂-alkylene, C₃-C₁₂-alkenylene or C₃-C₁₂-alkinylene, wherein, with the exception of the (G)-terminal methylene group in the C₃-C₁₂-alkylene, C₃-C₁₂-alkenylene or C₃-C₁₂-alkinylene, one to three methylene units in the C₃-C₁₂-alkylene, C₃-C₁₂-alkenylene or C₃-C₁₂-alkinylene are isosterically replaced by O, S, NR⁷, CO, SO or SO₂, wherein R⁷ has the same meaning as R⁶, but is selected independently thereof;

G is selected from the group consisting of G¹, G², G³, G⁴, G⁵, and G⁶ wherein G must contain at least one aromatic ring, wherein

G¹ is $-(CR^9R^{10})_m-R^8$

and

m is 0 or 1,

R⁸ is selected from the group consisting of benzyl, diphenylmethyl, phenyl,

anellated bi- and tricyclic aromatic or partially hydrogenated carbocyclic ring systems with 8 to 18 ring atoms, and at least one aromatic ring, wherein the linkage can occur over an aromatic or a hydrogenated ring and either directly or over a methylene group;

R⁹ is selected from the group consisting of hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₂-C₆-alkinyl, benzyl, phenyl,

anellated bi- and tricyclic aromatic ring systems with 8 to 18 ring atoms, and at least one aromatic ring, wherein the linkage can occur over an aromatic ring and either directly or over a methylene group;

R¹⁰ is the same as R⁹, but is selected independently thereof, or is hydroxy;

G² is =CR⁸R⁹

which is bound to D by means of a double bond, wherein R⁸ and R⁹ have the above meaning;

G³ is -X-(CH₂)_n-(CR⁹R¹⁰)_m-R⁸ or -NR⁸R⁹

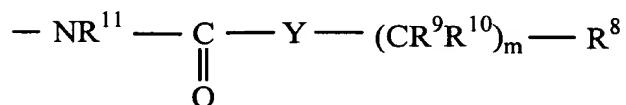
wherein m and the substituents R⁸, R⁹, and R¹⁰ have the above meanings, and

n is 0, 1 or 2

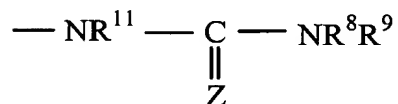
X is NR¹¹, O or S wherein

R¹¹ has the same meaning as R⁴, but is selected independently thereof,

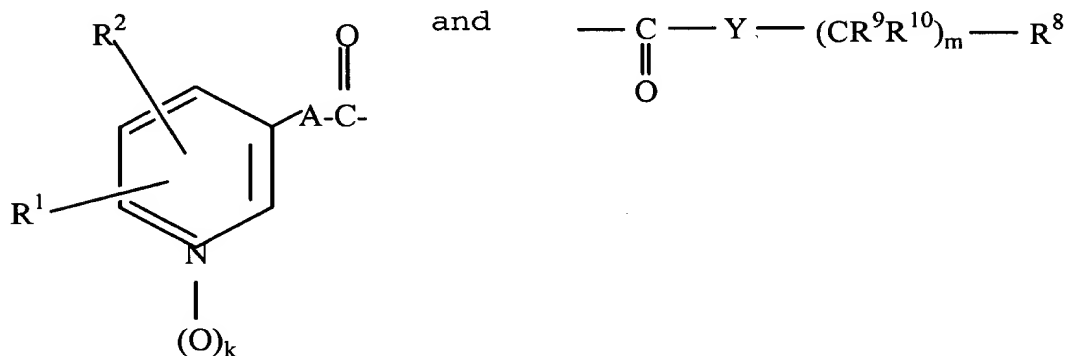
G⁴ is selected from the group consisting of



and



wherein structural element D-G cannot contain a total of more than 1 amide grouping, wherein m and the substituents R⁸, R⁹, R¹⁰, and R¹¹ can have the above meaning, wherein the residues



are not identical, and

Y is selected from the grouping consisting of methylene, ethylene, ethenylene, or represents a bond, and

Z is O or S;

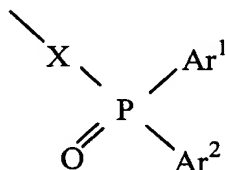
G⁵ is -NR¹¹-SO₂-R¹²

wherein R¹¹ has the above meaning, and

R¹² is selected from the group consisting of C₁-C₆-alkyl and phenyl,

anellated bi- and tricyclic aromatic or partially hydrogenated carbocyclic ring systems with 8 to 18 ring atoms, and at least an aromatic ring, wherein the linkage can occur over an aromatic or hydrogenated ring,

G⁶ is



wherein X has the above meaning and

Ar¹ and Ar² are selected independently of each other from the group consisting of phenyl, pyridyl and naphthyl;

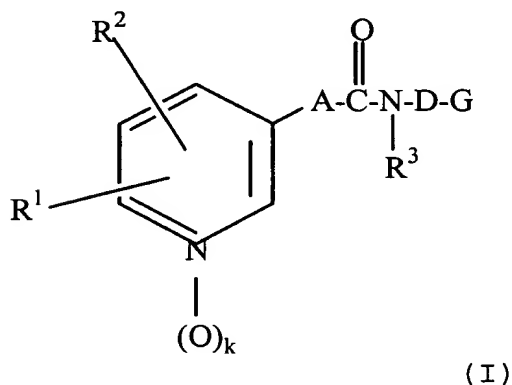
and wherein aromatic ring systems in the substituents R¹, R², R³, R⁴, R⁵, R⁸, R⁹, R¹⁰, R¹¹, R¹², Ar¹ and Ar² and =CR⁸R⁹ may be substituted independently from each other by one to three of the same or different groups independently selected from the group consisting of halogen, cyano, C₁-C₆-alkyl, trifluoromethyl, C₃-C₈-cycloalkyl, benzyl, phenyl, hydroxy, C₁-C₆-hydroxyalkyl, C₁-C₆-alkoxy, C₁-C₆-alkoxy entirely or partially substituted by fluorine, benzyloxy, phenoxy, mercapto, C₁-C₆-alkylthio, phenylthio, sulfo, carboxy, C₂-C₇-carboxyalkyl, C₃-C₇-carboxyalkenyl, C₂-C₇-alkoxycarbonyl, benzyloxycarbonyl, nitro, amino, C₁-C₆-aminoalkyl, mono-C₁-C₆-alkylamino, di-(C₁-C₆-alkyl)amino

and, for two adjacent residues on the aromatic ring,
methylenedioxy and

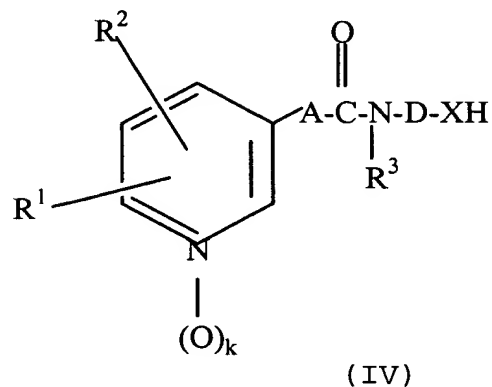
wherein alkyl residues in the ~~Group~~ group G can be substituted by one or two of the same or different groups selected from the group consisting of hydroxy, carboxy, C₂-C₇-alkoxycarbonyl, benzyloxycarbonyl, amino, mono-C₁-C₆-alkylamino and di-(C₁-C₆-alkyl)amino;

the cis- and trans-isomers, E- and Z-isomers including the corresponding enantiomers, diastereomers and other isomers, the tautomers and their acid addition salts including their hydrates and solvates,
wherein if R¹, R² and R³ are hydrogen, A is not -CH=CH-, D is not -(CH₂)₅- and G is not -N(C₂H₅)-CH₂-phenyl,
wherein if R¹, R² and R³ are hydrogen, A is not -CH=CH-, D is not -(CH₂)₅-N(CH₂CH₃)-CH₂- and G is not phenyl.

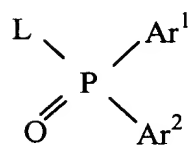
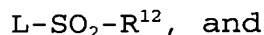
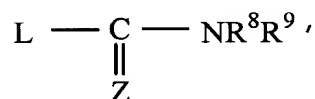
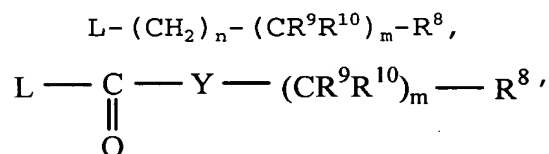
73. (currently amended) A method for the production of a compound of formula (I)



the method comprising reacting a compound of formula (IV)



with alkylation or arylation agents or carboxylic acid, carbamic acid, thiocarbamic acid, sulfonic acid or phosphinic acid derivatives of the following compounds



wherein L represents a leaving group selected from the group consisting of reactive ~~hologenated~~ halogenated derivatives of an alcohol, and sulfonic acid esters, X = NR¹¹ and R¹ is selected from the group consisting of hydrogen, halogen, cyano, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₂-C₆-alkynyl, trifluoromethyl, C₃-C₈-cycloalkyl, C₁-C₆-hydroxyalkyl, hydroxy, C₁-C₆-alkoxy, C₃-C₈-cycloalkyloxy, benzyloxy, C₁-C₇-alkanoyloxy, C₁-C₆-alkylthio, C₂-C₇-

alkoxycarbonyl, aminocarbonyl, C₂-C₇-alkylaminocarbonyl, C₃-C₁₃-dialkylaminocarbonyl, carboxy, phenyl, phenoxy, phenylthio, pyridyloxy, pyridylthio, and NR⁴R⁵, wherein

R⁴ and R⁵ are selected independently of each other from the group consisting of hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₃-C₆-alkinyl, benzyl and phenyl;

R² is selected from the group consisting of hydrogen, halogen, cyano, C₁-C₆-alkyl, trifluoromethyl, hydroxy, C₁-C₆-alkoxy and benzyloxy;

R³ is selected from the group consisting of hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₃-C₆-alkinyl, hydroxy, C₁-C₆-alkoxy and benzyloxy;

k is 0 or 1,

A is selected from the group consisting of C₁-C₆-alkylene,

a substituted C₁-C₆-alkylene which may be substituted one to three-fold by C₁-C₃-alkyl, hydroxy, C₁-C₃-alkoxy, fluorine, or phenyl;

C₂-C₆-alkylene, in which a methylene unit is isosterically replaced by O, S, NR⁶, CO, SO or SO₂, wherein, with the exception of CO, the isosteric substitution is not adjacent to the amide group and R⁶ is selected from the group consisting of hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₁-C₆-acyl, and C₁-C₆-alkanesulfonyl;

1,2-cyclopropylene;

C₂-C₆-alkenylene,

a substituted C₂-C₆-alkenylene which is substituted once or twice by C₁-C₃-alkyl, hydroxy, C₁-C₃-alkoxy, fluorine, cyano or phenyl_{7i}

C₄-C₆-alkadienylene,

a substituted C₄-C₆-alkadienylene which is substituted once or twice by C₁-C₃-alkyl, fluorine, cyano or phenyl_{7i}

1,3,5-hexatrienylene,

a substituted 1,3,5-hexatrienylene, which is substituted by C₁-C₃-alkyl, fluorine, cyano or phenyl_{7i} and

ethinylene,

D is selected from the group consisting of

C₃-C₁₂-alkylene,

a substituted C₃-C₁₂-alkylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl_{7i}

C₃-C₁₂-alkenylene,

a substituted C₃-C₁₂-alkenylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl_{7i}

C₅-C₁₂-alkadienylene,

a substituted C₅-C₁₂-alkadienylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl_{7i}

C₃-C₁₂-alkinylene,

a substituted C₃-C₁₂-alkynylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl;
i

C₅-C₁₂-alkeninylene,

a substituted C₅-C₁₂-alkeninylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl;
i
and

C₃-C₁₂-alkylene, C₃-C₁₂-alkenylene or C₃-C₁₂-alkynylene, wherein, with the exception of the (G)-terminal methylene group in the C₃-C₁₂-alkylene, C₃-C₁₂-alkenylene or C₃-C₁₂-alkynylene, one to three methylene units in the C₃-C₁₂-alkylene, C₃-C₁₂-alkenylene or C₃-C₁₂-alkynylene are isosterically replaced by O, S, NR⁷, CO, SO or SO₂, wherein R⁷ has the same meaning as R⁶, but is selected independently thereof;

m is 0 or 1;

R⁸ is selected from the group consisting of benzyl, diphenylmethyl, phenyl,

anellated bi- and tricyclic aromatic or partially hydrogenated carbocyclic ring systems with 8 to 18 ring atoms, and at least one aromatic ring, wherein the linkage can occur over an aromatic or a hydrogenated ring and either directly or over a methylene group;

R⁹ is selected from the group consisting of hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₂-C₆-alkynyl, benzyl, phenyl,

anellated bi- and tricyclic aromatic ring systems with 8 to 18 ring atoms, and at least one aromatic ring, wherein

the linkage can occur over an aromatic ring and either directly or over a methylene group;

R¹⁰ is the same as R⁹, but is selected independently thereof, or is hydroxy;

G is selected from the group consisting of G³, G⁴, G⁵ and G⁶ wherein G must contain at least one aromatic ring, wherein

G³ is -X⁺-(CH₂)_n-(CR⁹R¹⁰)_m-R⁸

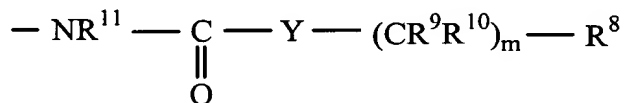
wherein m and the substituents R⁸, R⁹, and R¹⁰ have the above meanings, and

n is 0, 1 or 2

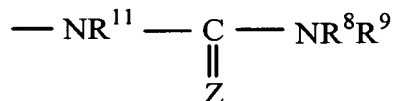
X is NR¹¹, wherein

R¹¹ has the same meaning as R⁴, but is selected independently thereof,

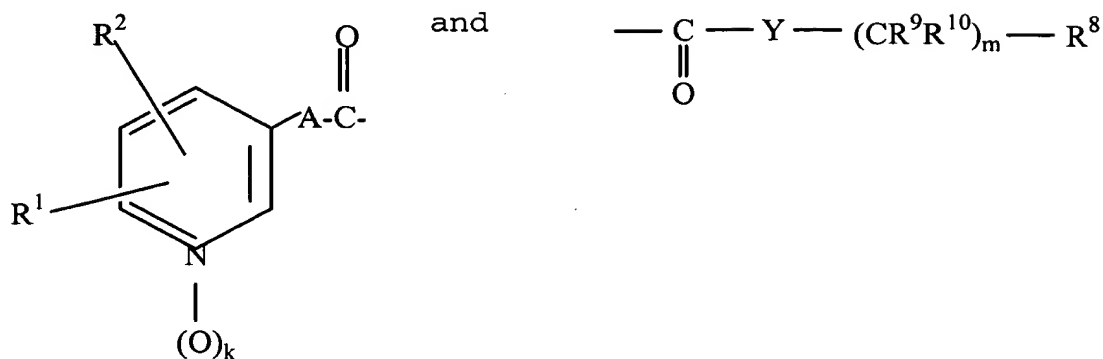
G⁴ is selected from the group consisting of



and



wherein structural element D-G cannot contain a total of more than 1 amide grouping, wherein m and the substituents R⁸, R⁹, R¹⁰, and R¹¹ can have the above meaning, wherein the residues



are not identical, and

Y is selected from the grouping consisting of methylene, ethylene, ethenylene, or represents a bond, and

Z is O or S;

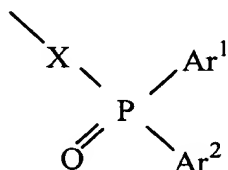
G⁵ is $-\text{NR}^{11}-\text{SO}_2-\text{R}^{12}$

wherein R¹¹ has the above meaning, and

R¹² is selected from the group consisting of C₁-C₆-alkyl and phenyl,

anellated bi- and tricyclic aromatic or partially hydrogenated carbocyclic ring systems with 8 to 18 ring atoms, and at least an aromatic ring, wherein the linkage can occur over an aromatic or hydrogenated ring,

G⁶ is



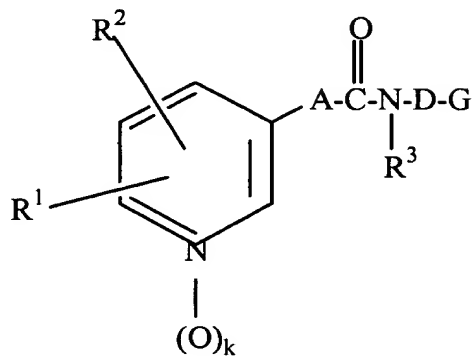
wherein X⁺ has the above meaning and

Ar¹ and Ar² are selected independently of each other from the group consisting of phenyl, pyridyl and naphthyl; and wherein aromatic ring systems in the substituents R¹, R², R³, R⁴, R⁵, R⁸, R⁹, R¹⁰, R¹¹, R¹², Ar¹ and Ar² and =CR⁸R⁹ and -NR⁸R⁹ may be substituted independently from each other by one to three of the same or different groups independently selected from the group consisting of halogen, cyano, C₁-C₆-alkyl, trifluoromethyl, C₃-C₈-cycloalkyl, benzyl, phenyl, hydroxy, C₁-C₆-hydroxyalkyl, C₁-C₆-alkoxy, C₁-C₆-alkoxy entirely or partially substituted by fluorine, benzyloxy, phenoxy, mercapto, C₁-C₆-alkylthio, phenylthio, sulfo, carboxy, C₂-C₇-carboxyalkyl, C₃-C₇-carboxyalkenyl, C₂-C₇-alkoxycarbonyl, benzyloxycarbonyl, nitro, amino, C₁-C₆-aminoalkyl, mono-C₁-C₆-alkylamino, di-(C₁-C₆-alkyl)amino and, for two adjacent residues on the aromatic ring, methylenedioxy and

wherein alkyl residues in the ~~Group~~ group G can be substituted by one or two of the same or different groups selected from the group consisting of hydroxy, carboxy, C₂-C₇-alkoxycarbonyl, benzyloxycarbonyl, amino, mono-C₁-C₆-alkylamino and di-(C₁-C₆-alkyl)amino;

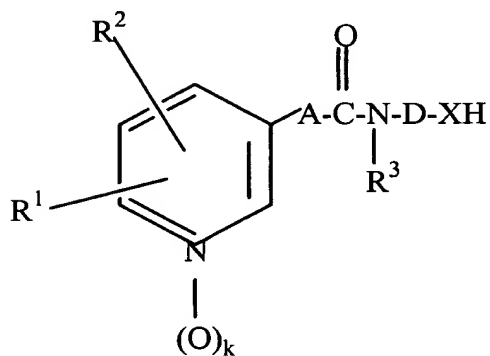
the cis- and trans-isomers, E- and Z-isomers including the corresponding enantiomers, diastereomers and other isomers, the tautomers and their acid addition salts including their hydrates and solvates.

74. (currently amended) A method for the production of a compound of formula (I)



(I)

the method comprising reacting a compound of formula (IV)



(IV)

in an inert solvent with alkylation or arylation agents of $L-(CH_2)_n-(CR^9R^{10})_m-R^8$ at a temperature of between 0°C and 180°C ,

wherein L is a leaving group, $X=NR^{11}$, and

R^1 is selected from the group consisting of hydrogen, halogen, cyano, C_1 - C_6 -alkyl, C_3 - C_6 -alkenyl, C_2 - C_6 -alkinyl, trifluoromethyl, C_3 - C_8 -cycloalkyl, C_1 - C_6 -hydroxyalkyl, hydroxy, C_1 - C_6 -alkoxy, C_3 - C_8 -cycloalkyloxy, benzyloxy, C_1 - C_7 -alkanoyloxy, C_1 - C_6 -alkylthio, C_2 - C_7 -alkoxycarbonyl, aminocarbonyl, C_2 - C_7 -alkylaminocarbonyl, C_3 - C_{13} -dialkylaminocarbonyl, carboxy, phenyl, phenoxy, phenylthio, pyridyloxy, pyridylthio, and NR^4R^5 , wherein

R⁴ and R⁵ are selected independently of each other from the group consisting of hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₃-C₆-alkinyl, benzyl and phenyl;

R² is selected from the group consisting of hydrogen, halogen, cyano, C₁-C₆-alkyl, trifluoromethyl, hydroxy, C₁-C₆-alkoxy and benzyloxy;

R³ is selected from the group consisting of hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₃-C₆-alkinyl, hydroxy, C₁-C₆-alkoxy and benzyloxy;

k is 0 or 1,

A is selected from the group consisting of C₁-C₆-alkylene,

a substituted C₁-C₆-alkylene which may be substituted one to three-fold by C₁-C₃-alkyl, hydroxy, C₁-C₃-alkoxy, fluorine, or phenyl;

C₂-C₆-alkylene, in which a methylene unit is isosterically replaced by O, S, NR⁶, CO, SO or SO₂, wherein, with the exception of CO, the isosteric substitution is not adjacent to the amide group and R⁶ is selected from the group consisting of hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₁-C₆-acyl, and C₁-C₆-alkanesulfonyl;

1,2-cyclopropylene;

C₂-C₆-alkenylene,

a substituted C₂-C₆-alkenylene which is substituted once or twice by C₁-C₃-alkyl, hydroxy, C₁-C₃-alkoxy, fluorine, cyano or phenyl;

C₄-C₆-alkadienylene,

a substituted C₄-C₆-alkadienylene which is substituted once or twice by C₁-C₃-alkyl, fluorine, cyano or phenyl_{7i}

1,3,5-hexatrienylene,

a substituted 1,3,5-hexatrienylene, which is substituted by C₁-C₃-alkyl, fluorine, cyano or phenyl_{7i} and

ethinylene,

D is selected from the group consisting of

C₃-C₁₂-alkylene,

a substituted C₃-C₁₂-alkylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl_{7i}

C₃-C₁₂-alkenylene,

a substituted C₃-C₁₂-alkenylene which is substituted once or twice by C₁-C₆- alkyl, hydroxy, C₁-C₆-alkoxy or phenyl_{7i}

C₅-C₁₂-alkadienylene,

a substituted C₅-C₁₂-alkadienylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl_{7i}

C₃-C₁₂-alkinylene,

a substituted C₃-C₁₂-alkinylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl_{7i}

C₅-C₁₂-alkeninylene,

a substituted C₅-C₁₂-alkeninylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl;
and

C₃-C₁₂-alkylene, C₃-C₁₂-alkenylene or C₃-C₁₂-alkinylene, wherein, with the exception of the (G)-terminal methylene group in the C₃-C₁₂-alkylene, C₃-C₁₂-alkenylene or C₃-C₁₂-alkinylene, one to three methylene units in the C₃-C₁₂-alkylene, C₃-C₁₂-alkenylene or C₃-C₁₂-alkinylene are isosterically replaced by O, S, NR⁷, CO, SO or SO₂, wherein R⁷ has the same meaning as R⁶, but is selected independently thereof;

G is $-(CH_2)_n-(CR^9R^{10})_m-R^8$ $-X-(CH_2)_n-(CR^9R^{10})_m-R^8$

and

m is 0 or 1,

n is 0, 1 or 2,

R⁸ is selected from the group consisting of benzyl, diphenylmethyl, phenyl,

anellated bi- and tricyclic aromatic or partially hydrogenated carbocyclic ring systems with 8 to 18 ring atoms, and at least one aromatic ring, wherein the linkage can occur over an aromatic or a hydrogenated ring and either directly or over a methylene group;

R⁹ is selected from the group consisting of hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₂-C₆-alkinyl, benzyl, phenyl,

anellated bi- and tricyclic aromatic ring systems with 8 to 18 ring atoms, and at least one aromatic ring, wherein the linkage can occur over an aromatic ring and either directly or over a methylene group;

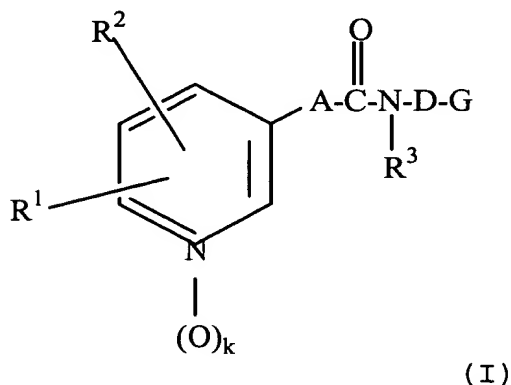
R¹⁰ is the same as R⁹, but is selected independently thereof, or is hydroxy;

R¹¹ has the same meaning as R⁴, but is selected independently thereof;

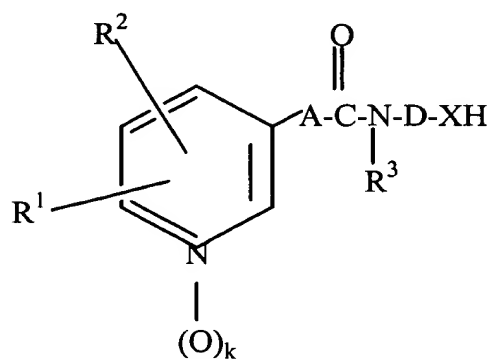
wherein alkyl residues in the ~~Group~~ group G can be substituted by one or two of the same or different groups selected from the group consisting of hydroxy, carboxy, C₂-C₇-alkoxycarbonyl, benzyloxycarbonyl, amino, mono-C₁-C₆-alkylamino and di-(C₁-C₆-alkyl)amino;

the cis- and trans-isomers, E- and Z-isomers including the corresponding enantiomers, diastereomers and other isomers, the tautomers and their acid addition salts including their hydrates and solvates.

75. (currently amended) A method for the production of a compound of formula (I)

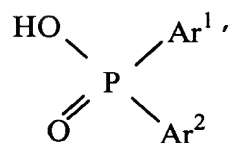
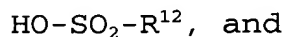
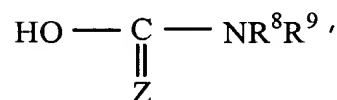
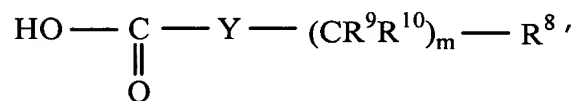


the method comprising reacting a compound of formula (IV)



(IV)

with alkylation or arylation agents or carboxylic acid, carbamic acid, thiocarbamic acid, sulfonic acid or phosphinic acid derivatives of the following compounds



wherein X is NR^{11} and

R^1 is selected from the group consisting of hydrogen, halogen, cyano, C_1-C_6 -alkyl, C_3-C_6 -alkenyl, C_2-C_6 -alkinyl, trifluoromethyl, C_3-C_8 -cycloalkyl, C_1-C_6 -hydroxyalkyl, hydroxy, C_1-C_6 -alkoxy, C_3-C_8 -cycloalkyloxy, benzyloxy, C_1-C_7 -alkanoyloxy, C_1-C_6 -alkylthio, C_2-C_7 -alkoxycarbonyl, aminocarbonyl, C_2-C_7 -alkylaminocarbonyl, C_3-C_{13} -dialkylaminocarbonyl, carboxy, phenyl, phenoxy, phenylthio, pyridyloxy, pyridylthio, and NR^4R^5 , wherein

R⁴ and R⁵ are selected independently of each other from the group consisting of hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₃-C₆-alkinyl, benzyl and phenyl;

R² is selected from the group consisting of hydrogen, halogen, cyano, C₁-C₆-alkyl, trifluoromethyl, hydroxy, C₁-C₆-alkoxy and benzyloxy;

R³ is selected from the group consisting of hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₃-C₆-alkinyl, hydroxy, C₁-C₆-alkoxy and benzyloxy;

k is 0 or 1,

A is selected from the group consisting of C₁-C₆-alkylene,

a substituted C₁-C₆-alkylene which may be substituted one to three-fold by C₁-C₃-alkyl, hydroxy, C₁-C₃-alkoxy, fluorine, or phenyl;

C₂-C₆-alkylene, in which a methylene unit is isosterically replaced by O, S, NR⁶, CO, SO or SO₂, wherein, with the exception of CO, the isosteric substitution is not adjacent to the amide group and R⁶ is selected from the group consisting of hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₁-C₆-acyl, and C₁-C₆-alkanesulfonyl;

1,2-cyclopropylene;

C₂-C₆-alkenylene,

a substituted C₂-C₆-alkenylene which is substituted once or twice by C₁-C₃-alkyl, hydroxy, C₁-C₃-alkoxy, fluorine, cyano or phenyl;

C₄-C₆-alkadienylene,

a substituted C₄-C₆-alkadienylene which is substituted once or twice by C₁-C₃-alkyl, fluorine, cyano or phenyl_{7i}

1,3,5-hexatrienylene,

a substituted 1,3,5-hexatrienylene, which is substituted by C₁-C₃-alkyl, fluorine, cyano or phenyl_{7i} and

ethinylene,

D is selected from the group consisting of

C₃-C₁₂-alkylene,

a substituted C₃-C₁₂-alkylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl_{7i}

C₃-C₁₂-alkenylene,

a substituted C₃-C₁₂-alkenylene which is substituted once or twice by C₁-C₆- alkyl, hydroxy, C₁-C₆-alkoxy or phenyl_{7i}

C₅-C₁₂-alkadienylene,

a substituted C₅-C₁₂-alkadienylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl_{7i}

C₃-C₁₂-alkinylene,

a substituted C₃-C₁₂-alkinylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl_{7i}

C₅-C₁₂-alkeninylene,

a substituted C₅-C₁₂-alkeninylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl;
and

C₃-C₁₂-alkylene, C₃-C₁₂-alkenylene or C₃-C₁₂-alkinylene, wherein, with the exception of the (G)-terminal methylene group in the C₃-C₁₂-alkylene, C₃-C₁₂-alkenylene or C₃-C₁₂-alkinylene, one to three methylene units in the C₃-C₁₂-alkylene, C₃-C₁₂-alkenylene or C₃-C₁₂-alkinylene are isosterically replaced by O, S, NR⁷, CO, SO or SO₂, wherein R⁷ has the same meaning as R⁶, but is selected independently thereof;

m is 0 or ~~4~~ 1,

R⁸ is selected from the group consisting of benzyl, diphenylmethyl, phenyl, benzocyclobutyl, indanyl, indenyl, oxoindanyl, naphthyl, dihydronaphthyl, tetrahydronaphthyl, biphenylenyl, fluorenyl, oxofluorenyl, anthryl, dihydroanthryl, oxodihydroanthryl, dioxodihydroanthryl, phenanthryl, dibenzocycloheptenyl, dihydrodibenzocycloheptenyl, oxodihydrodibenzocyclooctenyl, and tetrahydrodibenzocyclooctenyl;

R⁹ is selected from the group consisting of hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₂-C₆-alkinyl, benzyl, phenyl,

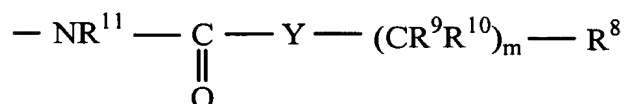
indanyl, indenyl, oxoindanyl, naphthyl, dihydronaphthyl, tetrahydronaphthyl, biphenylenyl, anthryl, dihydroanthryl, oxodihydroanthryl, phenanthryl, dibenzocycloheptenyl, dihydrodibenzocycloheptenyl, and oxodihydrodibenzocycloheptenyl,

R^{10} is the same as R^9 , but is selected independently thereof, or is hydroxy;

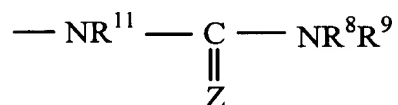
R^{11} has the same meaning as R^4 , but is selected independently thereof;

G is selected from the group consisting of G^4 , G^5 , and G^6 wherein G must contain at least one aromatic ring, wherein

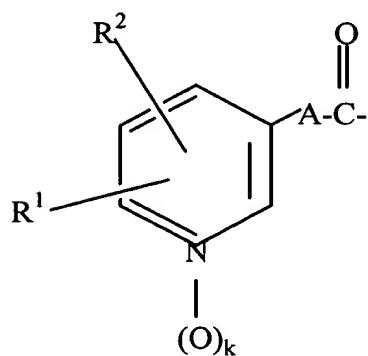
G^4 is selected from the group consisting of



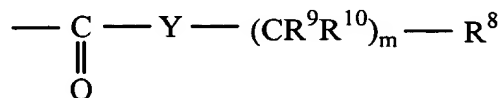
and



wherein structural element D-G cannot contain a total of more than 1 amide grouping, wherein m and the substituents R^8 , R^9 , R^{10} , and R^{11} can have the above meaning, wherein the residues



and



are not identical, and

Y is selected from the grouping consisting of methylene, ethylene, ethenylene, or represents a bond, and

Z is O or S;

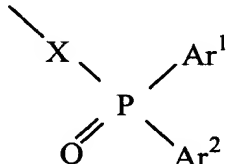
G⁵ is -NR¹¹-SO₂-R¹²

wherein R¹¹ has the above meaning, and

R¹² is selected from the group consisting of C₁-C₆-alkyl and phenyl,

anellated bi- and tricyclic aromatic or partially hydrogenated carbocyclic ring systems with 8 to 18 ring atoms, and at least an aromatic ring, wherein the linkage can occur over an aromatic ring,

G⁶ is



wherein X has the above meaning and

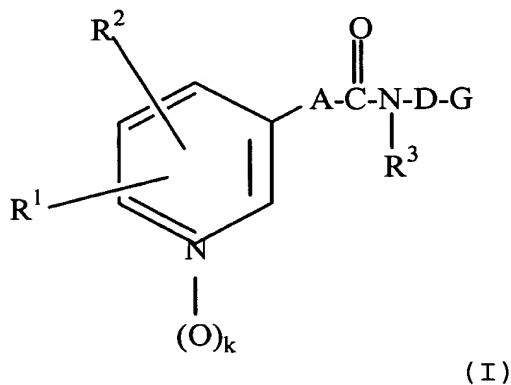
Ar¹ and Ar² are selected independently of each other from the group consisting of phenyl, pyridyl and naphthyl; and wherein aromatic ring systems in the substituents R¹, R², R³, R⁴, R⁵, R⁸, R⁹, R¹⁰, R¹¹, R¹², Ar¹ and Ar² may be substituted independently from each other by one to three of the same or different groups independently selected from the group consisting of halogen, cyano, C₁-C₆-alkyl, trifluoromethyl, C₃-C₈-cycloalkyl, benzyl, phenyl, hydroxy, C₁-C₆-hydroxyalkyl, C₁-C₆-alkoxy, C₁-C₆-alkoxy entirely or partially substituted by fluorine, benzyloxy, phenoxy,

mercapto, C₁-C₆-alkylthio, phenylthio, sulfo, carboxy, C₂-C₇-carboxyalkyl, C₃-C₇-carboxyalkenyl, C₂-C₇-alkoxycarbonyl, benzyloxycarbonyl, nitro, amino, C₁-C₆-aminoalkyl, mono-C₁-C₆-alkylamino, di-(C₁-C₆-alkyl)amino and, for two adjacent residues on the aromatic ring, methylenedioxy and

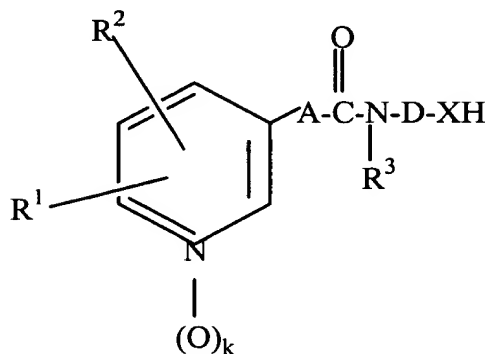
wherein alkyl residues in the ~~Group~~ group G can be substituted by one or two of the same or different groups selected from the group consisting of hydroxy, carboxy, C₂-C₇-alkoxycarbonyl, benzyloxycarbonyl, amino, mono-C₁-C₆-alkylamino and di-(C₁-C₆-alkyl)amino;

the cis- and trans-isomers, E- and Z-isomers including the corresponding enantiomers, diastereomers and other isomers, the tautomers and their acid addition salts including their hydrates and solvates.

76. (currently amended) A method for the production of a compound of formula (I)



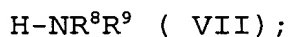
the method comprising reacting a compound of formula (IV)



(IV)

with a carbonyl group transmitter to form an intermediate, wherein the carbonyl group transmitter is bis-trichloromethyl carbonate or carbonyldiimidazole,

which intermediate is then reacted with a compound of formula (VII),



wherein

R¹ is selected from the group consisting of hydrogen, halogen, cyano, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₂-C₆-alkinyl, trifluoromethyl, C₃-C₈-cycloalkyl, C₁-C₆-hydroxyalkyl, hydroxy, C₁-C₆-alkoxy, C₃-C₈-cycloalkyloxy, benzyloxy, C₁-C₇-alkanoyloxy, C₁-C₆-alkylthio, C₂-C₇-alkoxycarbonyl, aminocarbonyl, C₂-C₇-alkylaminocarbonyl, C₃-C₁₃-dialkylaminocarbonyl, carboxy, phenyl, phenoxy, phenylthio, pyridyloxy, pyridylthio, and NR⁴R⁵, wherein

R⁴ and R⁵ are selected independently of each other from the group consisting of hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₃-C₆-alkinyl, benzyl and phenyl;

R² is selected from the group consisting of hydrogen, halogen, cyano, C₁-C₆-alkyl, trifluoromethyl, hydroxy, C₁-C₆-alkoxy and benzyloxy;

R³ is selected from the group consisting of hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₃-C₆-alkinyl, hydroxy, C₁-C₆-alkoxy and benzyloxy;

k is 0 or 1,

A is selected from the group consisting of C₁-C₆-alkylene,

a substituted C₁-C₆-alkylene which may be substituted one to three-fold by C₁-C₃-alkyl, hydroxy, C₁-C₃-alkoxy, fluorine, or phenyl;

C₂-C₆-alkylene, in which a methylene unit is isosterically replaced by O, S, NR⁶, CO, SO or SO₂, wherein, with the exception of CO, the isosteric substitution is not adjacent to the amide group and R⁶ is selected from the group consisting of hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₁-C₆-acyl, and C₁-C₆-alkanesulfonyl;

1,2-cyclopropylene;

C₂-C₆-alkenylene,

a substituted C₂-C₆-alkenylene which is substituted once or twice by C₁-C₃-alkyl, hydroxy, C₁-C₃-alkoxy, fluorine, cyano or phenyl;

C₄-C₆-alkadienylene,

a substituted C₄-C₆-alkadienylene which is substituted once or twice by C₁-C₃-alkyl, fluorine, cyano or phenyl;

1,3,5-hexatrienylene,

a substituted 1,3,5-hexatrienylene, which is substituted by C₁-C₃-alkyl, fluorine, cyano or phenyl_{7i} and

ethinylene,

D is selected from the group consisting of

C₃-C₁₂-alkylene,

a substituted C₃-C₁₂-alkylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl_{7i}

C₃-C₁₂-alkenylene,

a substituted C₃-C₁₂-alkenylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl_{7i}

C₅-C₁₂-alkadienylene,

a substituted C₅-C₁₂-alkadienylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl_{7i}

C₃-C₁₂-alkinylene,

a substituted C₃-C₁₂-alkinylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl_{7i}

C₅-C₁₂-alkeninylene,

a substituted C₅-C₁₂-alkeninylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl_{7i} and

C₃-C₁₂-alkylene, C₃-C₁₂-alkenylene or C₃-C₁₂-alkynylene, wherein, with the exception of the (G)-terminal methylene group in the C₃-C₁₂-alkylene, C₃-C₁₂-alkenylene or C₃-C₁₂-alkynylene, one to three methylene units in the C₃-C₁₂-alkylene, C₃-C₁₂-alkenylene or C₃-C₁₂-alkynylene are isosterically replaced by O, S, NR⁷, CO, SO or SO₂, wherein R⁷ has the same meaning as R⁶, but is selected independently thereof;

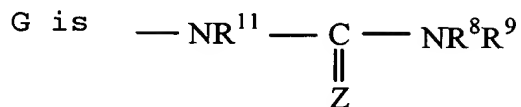
R⁸ is selected from the group consisting of benzyl, diphenylmethyl, phenyl, benzocyclobutyl, indanyl, indenyl, oxoindanyl, naphthyl, dihydronaphthyl, tetrahydronaphthyl, biphenylenyl, fluorenyl, oxofluorenyl, anthryl, dihydroanthryl, oxodihydroanthryl, dioxodihydroanthryl, phenanthryl, dibenzocycloheptenyl, dihydrodibenzocycloheptenyl, oxodihydrodibenzocyclooctenyl, and tetrahydrodibenzocyclooctenyl;

R⁹ is selected from the group consisting of hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₂-C₆-alkinyl, benzyl, phenyl,

indanyl, indenyl, oxoindanyl, naphthyl, dihydronaphthyl, tetrahydronaphthyl, biphenylenyl, anthryl, dihydroanthryl, oxodihydroanthryl, phenanthryl, dibenzocycloheptenyl, dihydrodibenzocycloheptenyl, and oxodihydrodibenzocycloheptenyl,

R¹¹ has the same meaning as R⁴, but is selected independently thereof;

X is NR¹¹;



wherein structural element D-G cannot contain a total of more than 1 amide grouping, wherein R⁸, R⁹, and R¹¹ can have the above meaning,

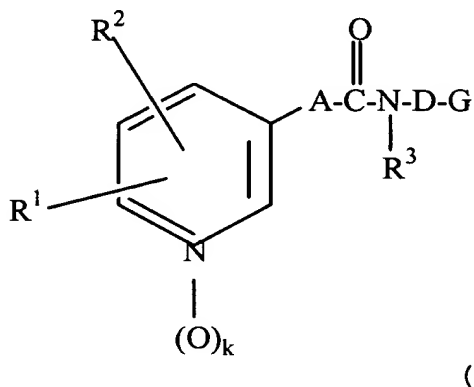
Z is O or S;

and wherein aromatic ring systems in the substituents R¹, R², R³, R⁴, R⁵, R⁸, R⁹, and R¹¹ may be substituted independently from each other by one to three of the same or different groups independently selected from the group consisting of halogen, cyano, C₁-C₆-alkyl, trifluoromethyl, C₃-C₈-cycloalkyl, benzyl, phenyl, hydroxy, C₁-C₆-hydroxyalkyl, C₁-C₆-alkoxy, C₁-C₆-alkoxy entirely or partially substituted by fluorine, benzyloxy, phenoxy, mercapto, C₁-C₆-alkylthio, phenylthio, sulfo, carboxy, C₂-C₇-carboxyalkyl, C₃-C₇-carboxyalkenyl, C₂-C₇-alkoxycarbonyl, benzyloxycarbonyl, nitro, amino, C₁-C₆-aminoalkyl, mono-C₁-C₆-alkylamino, di-(C₁-C₆-alkyl)amino and, for two adjacent residues on the aromatic ring, methylenedioxy and

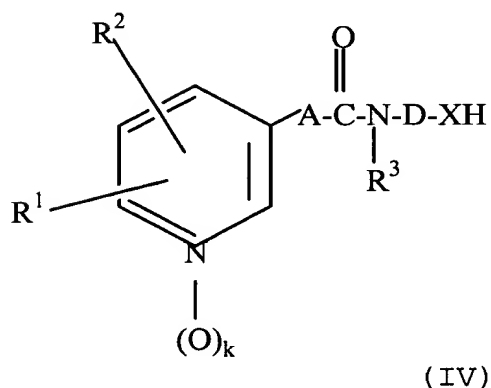
wherein alkyl residues in the group G can be substituted by one or two of the same or different groups selected from the group consisting of hydroxy, carboxy, C₂-C₇-alkoxycarbonyl, benzyloxycarbonyl, amino, mono-C₁-C₆-alkylamino and di-(C₁-C₆-alkyl)amino;

the cis- and trans-isomers, E- and Z-isomers including the corresponding enantiomers, diastereomers and other isomers, the tautomers and their acid addition salts including their hydrates and solvates.

77. (currently amended) A method for the production of a compound of formula (I)



the method comprising reacting a compound of formula (IV)



with an isocyanate or isothiocyanate having formula $Z=C=N-R^8$ at a temperature of -20°C to 150°C , wherein

R^1 is selected from the group consisting of hydrogen, halogen, cyano, C_1 - C_6 -alkyl, C_3 - C_6 -alkenyl, C_2 - C_6 -alkinyl, trifluoromethyl, C_3 - C_8 -cycloalkyl, C_1 - C_6 -hydroxyalkyl, hydroxy, C_1 - C_6 -alkoxy, C_3 - C_8 -cycloalkyloxy, benzyloxy, C_1 - C_7 -alkanoyloxy, C_1 - C_6 -alkylthio, C_2 - C_7 -alkoxycarbonyl, aminocarbonyl, C_2 - C_7 -alkylaminocarbonyl, C_3 - C_{13} -dialkylaminocarbonyl, carboxy, phenyl, phenoxy, phenylthio, pyridyloxy, pyridylthio, and NR^4R^5 , wherein

R⁴ and R⁵ are selected independently of each other from the group consisting of hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₃-C₆-alkinyl, benzyl and phenyl;

R² is selected from the group consisting of hydrogen, halogen, cyano, C₁-C₆-alkyl, trifluoromethyl, hydroxy, C₁-C₆-alkoxy and benzyloxy;

R³ is selected from the group consisting of hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₃-C₆-alkinyl, hydroxy, C₁-C₆-alkoxy and benzyloxy;

k is 0 or 1,

A is selected from the group consisting of C₁-C₆-alkylene,

a substituted C₁-C₆-alkylene which may be substituted one to three-fold by C₁-C₃-alkyl, hydroxy, C₁-C₃-alkoxy, fluorine, or phenyl;

C₂-C₆-alkylene, in which a methylene unit is isosterically replaced by O, S, NR⁶, CO, SO or SO₂, wherein, with the exception of CO, the isosteric substitution is not adjacent to the amide group and R⁶ is selected from the group consisting of hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₁-C₆-acyl, and C₁-C₆-alkanesulfonyl;

1,2-cyclopropylene;

C₂-C₆-alkenylene,

a substituted C₂-C₆-alkenylene which is substituted once or twice by C₁-C₃-alkyl, hydroxy, C₁-C₃-alkoxy, fluorine, cyano or phenyl;

C₄-C₆-alkadienylene,

a substituted C₄-C₆-alkadienylene which is substituted once or twice by C₁-C₃-alkyl, fluorine, cyano or phenyl_{7,1}

1,3,5-hexatrienylene,

a substituted 1,3,5-hexatrienylene, which is substituted by C₁-C₃-alkyl, fluorine, cyano or phenyl_{7,1} and

ethinylene,

D is selected from the group consisting of

C₃-C₁₂-alkylene,

a substituted C₃-C₁₂-alkylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl_{7,1}

C₃-C₁₂-alkenylene,

a substituted C₃-C₁₂-alkenylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl_{7,1}

C₅-C₁₂-alkadienylene,

a substituted C₅-C₁₂-alkadienylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl_{7,1}

C₃-C₁₂-alkinylene

a substituted C₃-C₁₂-alkinylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl_{7,1}

C₅-C₁₂-alkeninylene,

a substituted C₅-C₁₂-alkeninylene which is substituted once or twice by C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy or phenyl;
and

C₃-C₁₂-alkylene, C₃-C₁₂-alkenylene or C₃-C₁₂-alkinylene, wherein, with the exception of the (G)-terminal methylene group in the C₃-C₁₂-alkylene, C₃-C₁₂-alkenylene or C₃-C₁₂-alkinylene, one to three methylene units in the C₃-C₁₂-alkylene, C₃-C₁₂-alkenylene or C₃-C₁₂-alkinylene are isosterically replaced by O, S, NR⁷, CO, SO or SO₂, wherein R⁷ has the same meaning as R⁶, but is selected independently thereof;

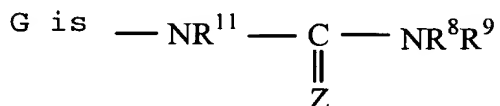
R⁸ is selected from the group consisting of benzyl, diphenylmethyl, phenyl, benzocyclobutyl, indanyl, indenyl, oxoindanyl, naphthyl, dihydronaphthyl, tetrahydronaphthyl, biphenylenyl, fluorenyl, oxofluorenyl, anthryl, dihydroanthryl, oxodihydroanthryl, dioxodihydroanthryl, phenanthryl, dibenzocycloheptenyl, dihydrodibenzocycloheptenyl, oxodihydrodibenzocyclooctenyl, and tetrahydrodibenzocyclooctenyl;

R⁹ is selected from the group consisting of hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₂-C₆-alkinyl, benzyl, phenyl,

indanyl, indenyl, oxoindanyl, naphthyl, dihydronaphthyl, tetrahydronaphthyl, biphenylenyl, anthryl, dihydroanthryl, oxodihydroanthryl, phenanthryl, dibenzocycloheptenyl, dihydrodibenzocycloheptenyl, and oxodihydrodibenzocycloheptenyl,

R¹¹ has the same meaning as R⁴, but is selected independently thereof;

X is NR¹¹;



wherein structural element D-G cannot contain a total of more than 1 amide grouping, wherein R⁸, R⁹, and R¹¹ can have the above meaning,

Z is O or S;

wherein alkyl residues in the group G can be substituted by one or two of the same or different groups selected from the group consisting of hydroxy, carboxy, C₂-C₇-alkoxycarbonyl, benzyloxycarbonyl, amino, mono-C₁-C₆-alkylamino and di-(C₁-C₆-alkyl)amino;

the cis- and trans-isomers, E- and Z-isomers including the corresponding enantiomers, diastereomers and other isomers, the tautomers and their acid addition salts including their hydrates and solvates.